ULTRABAC WARP

Continuous Data Protection for the Windows Platform

ULTRABAC SOFTWARE

User Guide v1.1

UltraBac Warp v1.1 User Guide

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UltraBac Warp for Windows v1.1 User Guide

Introduction

Welcome to the UltraBac Warp for Windows v1.1 User Guide. This guide describes UltraBac Warp for Windows, how to use the product, and how to derive maximum benefit from the product.

Founded in 1982, UltraBac Software has focused on producing reliable, innovative software while providing the foremost in customer service. With a track record of cutting-edge advancements, we work with our customers to ensure that as their companies grow and prosper, the software remains the best solution available to fit their needs. UltraBac Warp for Windows v1.1 is a brand new software offering that provides real-time backups for the Windows platform.

We here at UltraBac Software sincerely appreciate the time and effort you have invested in reviewing and selecting our products. We encourage customer feedback. Historically, customer ideas and suggestions have served as a principle building block of our company's design principles and philosophy. Please feel free to contact us with any comments or suggestions. Thank you for using UltraBac Warp for Windows.

Warm Regards,
Team UltraBac

UltraBac Warp Overview

UltraBac Warp for Windows v1.1 is a Continuous Image Protection™ (CIP™) solution for computers. Below are some of its features that set it apart from many other traditional disaster recovery methods:

- UltraBac Warp requires less space on backup media than traditional backup software. UltraBac Warp saves *block-level* differences rather than *file-level* differences. This means that if you change one byte of a 100 GB file, only the changed block is backed up.
- It lets you restore data to any point in time.
- It provides a way to access individual files or folders within a restore point using its **Mount/Unmount** feature. This access makes it possible to read copies of files within the restore point to any other location.
- It supports **Whole Partition Restore**. The contents of an entire hard drive, including the operating system, applications, and data, can be fully recovered in minutes instead of hours or days.
- It allows users to save backups to a local disk on the workstation, or a remote disk that is a shared network resource.
- It supports **bare-metal restore**, thus restoring the backed up system to an entirely separate piece of hardware.
- It supports backup and restore of unmounted partitions.
- It deletes old versions of files to make room for new versions; it auto-manages the local backup target area as a pool with a configurable size.
- Restore operations based upon retention policies.
- Backup or CIP operations can be monitored from a graphical chart.
- At the time of restore, time line representation can be used to identify the CIP state of the data.
- It provides localization support.
- It allows customers to mark specific events for rapid recovery.

Setup and Installation

Minimum System Requirements

Operating Systems

- Windows XP Professional - SP3 (32-bit supported)
  Please Note: UltraBac Media Builder cannot be used on Windows XP. A Bare Metal Recovery disk created using a Windows 7 system can be used for a Bare Metal Recovery of a Windows XP computer.
- Windows Vista (Business and Ultimate Editions)
- Windows 7 - SP1 (Professional, Enterprise, and Ultimate)
- UltraBac Warp can be used on the following Windows servers:
  - Windows Server 2003 - SP2
  - Windows Server 2003 R2
  - Windows Server 2008
  - Windows Server 2008 R2

Input device(s)

- Full QWERTY keyboard
- Pointing Device - Mouse (2 buttons)

Output device

A minimum screen display of 800 X 600 is required and 1024 X 768 is recommended. 256 color display required and 65536 colors recommended.

Memory

512 MB required, 2GB or greater recommended.

Software

- Update for Root Certificates for Windows XP [April 2012] (KB931125). http://www.microsoft.com/en-us/download/details.aspx?id=29434 (the update states it is for Windows XP, but it is a universal installer that is required for all OSs).
- Windows Automated Installation Kit (AIK) for Windows 7 installed for creating the Bare Metal Recovery disk. http://www.microsoft.com/en-us/download/details.aspx?id=5753 (The Windows AIK must be installed using an account with Administrator permissions).

Hardware

A DVD burner for creating the Windows Automated Installation Kit (AIK) for Windows 7 and Bare Metal Recovery disks.

Please Note: Software RAID disk drive configurations are not supported. Hardware RAID is supported.

Installation

To install UltraBac Warp on your computer, buy a licensed version of UltraBac Warp or download a trial version from the www.ultrabac.com Web site.

Please Note: The installation must be done using an account with Administrator permissions.

Select the appropriate Setup file to install the product. **Setup.en-us** allows you to install the product in English. Similarly, **Setup.ja-jp** file allows you to install the product in Japanese. The **Setup** file identifies the language of your computer and installs the product accordingly. Only local installations are currently supported.

Please Note: If the UltraBac Backup & Disaster Recovery product already exists on the computer, UltraBac Warp for Windows cannot be installed.

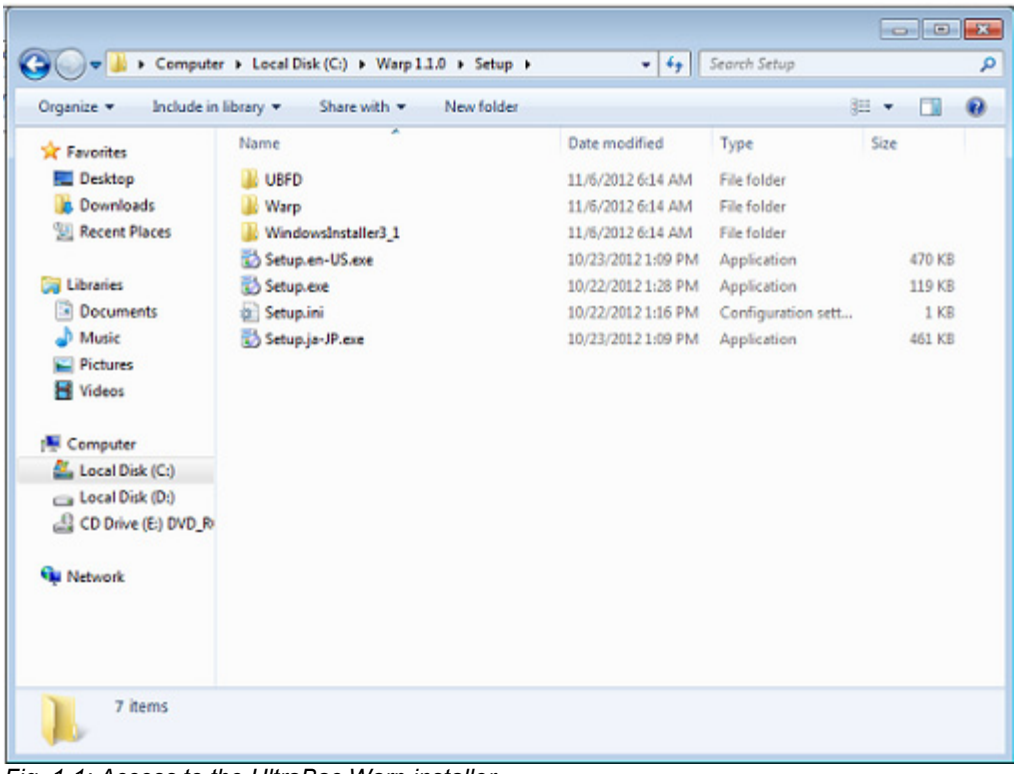


Fig. 1-1: Access to the UltraBac Warp installer.

UltraBac Filter Drivers (UBFD) are installed before the UltraBac Warp Setup Wizard is launched. Click "Install" to proceed with the installation.

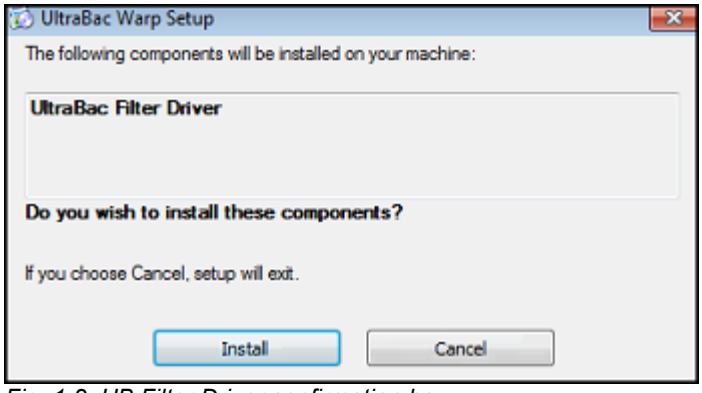

UltraBac Warp Setup
The following components will be installed on your machine:
UltraBac Filter Driver
Do you wish to install these components?
If you choose Cancel, setup will exit.
Install
Cancel

Fig. 1-2: UB Filter Driver confirmation box.

The following status bar shows the progress of UltraBac Filter Driver's installation.

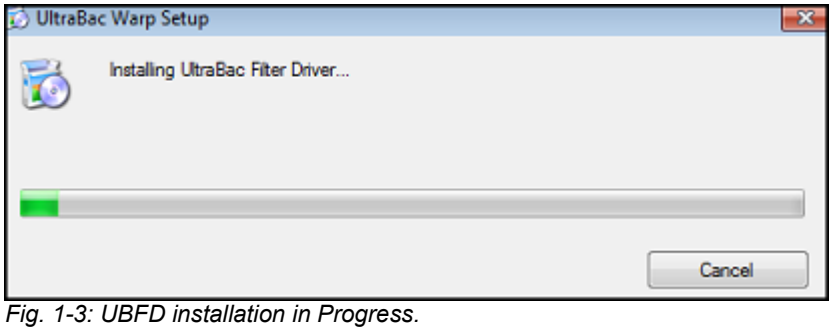


Fig. 1-3: UBFD installation in Progress.

Once the drivers are installed successfully, the computer needs to be rebooted before proceeding with the installation. To proceed with the reboot click "Yes", or to do it manually later click "No".

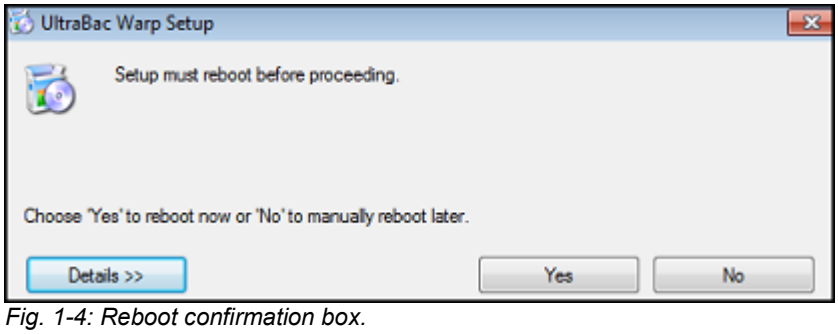


Fig. 1-4: Reboot confirmation box.

After rebooting the system, the UltraBac Warp Setup Wizard launches automatically and takes you through the next steps of installation. Click "Next" to proceed further.

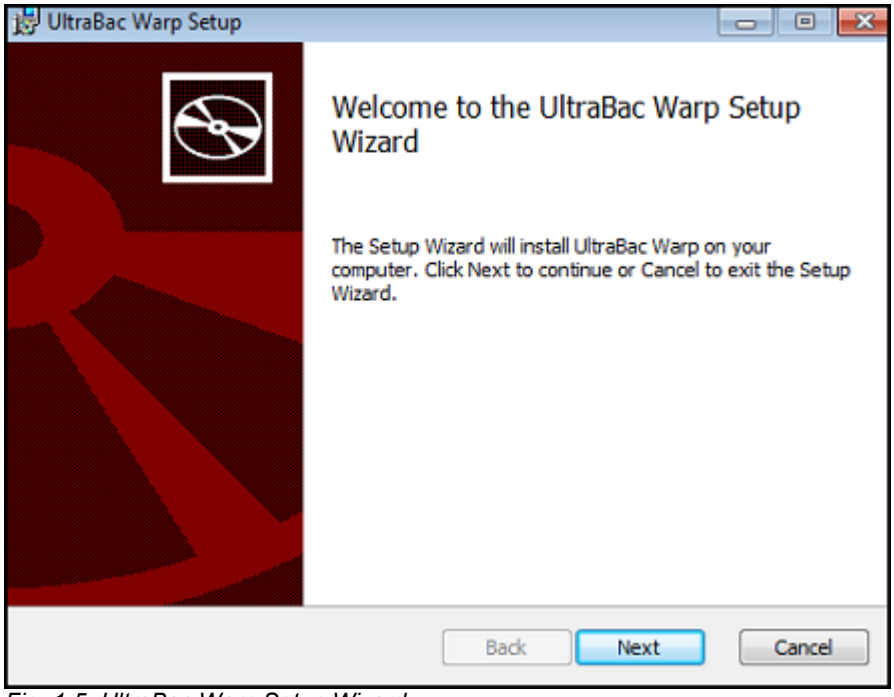

UltraBac Warp Setup
Welcome to the UltraBac Warp Setup Wizard
The Setup Wizard will install UltraBac Warp on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
Back
Next
Cancel

Fig. 1-5: UltraBac Warp Setup Wizard.

Accept the license agreement and click "Next" to proceed with the installation.

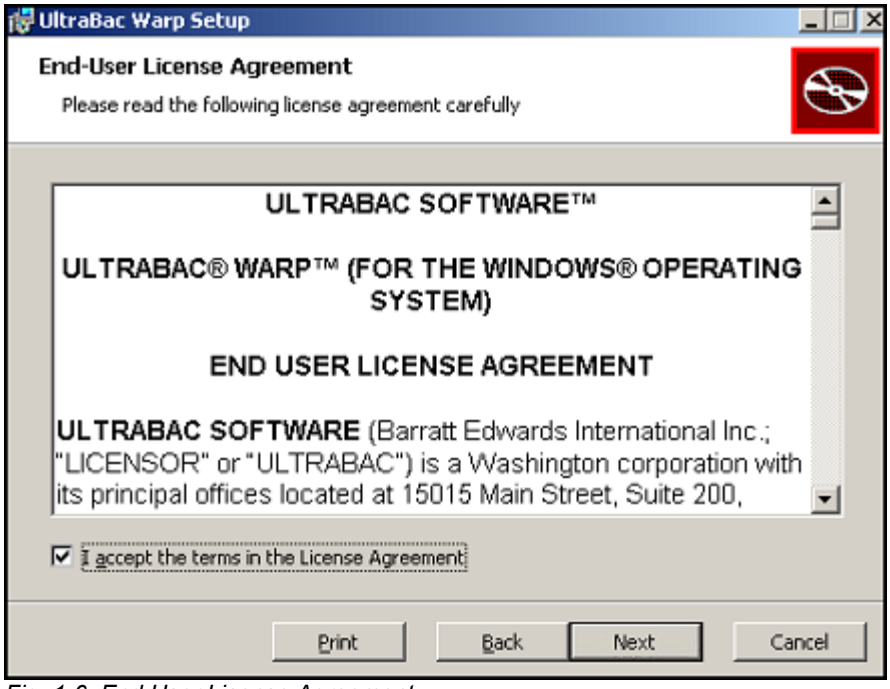

UltraBac Warp Setup
End-User License Agreement
Please read the following license agreement carefully
ULTRABAC SOFTWARE™
ULTRABAC® WARP™ (FOR THE WINDOWS® OPERATING SYSTEM)
END USER LICENSE AGREEMENT
ULTRABAC SOFTWARE (Barratt Edwards International Inc.; "LICENSOR" or "ULTRABAC") is a Washington corporation with its principal offices located at 15015 Main Street, Suite 200,
I accept the terms in the License Agreement
Print
Back
Next
Cancel

Fig. 1-6: End User License Agreement.

The default path is **C:\Program Files\UltraBac Warp**, but you may designate the path of your choice. Click "Change..." to designate a new default path, then browse and select the destination path for the setup files. Click "Next".

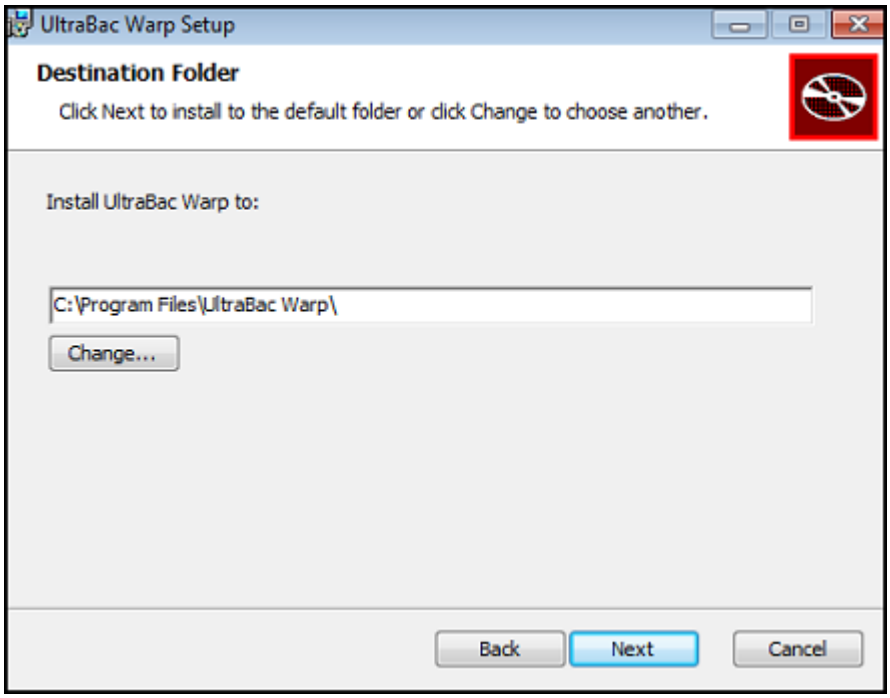


Fig. 1-7: Destination Folder.

Click "Install" to proceed with the installation.

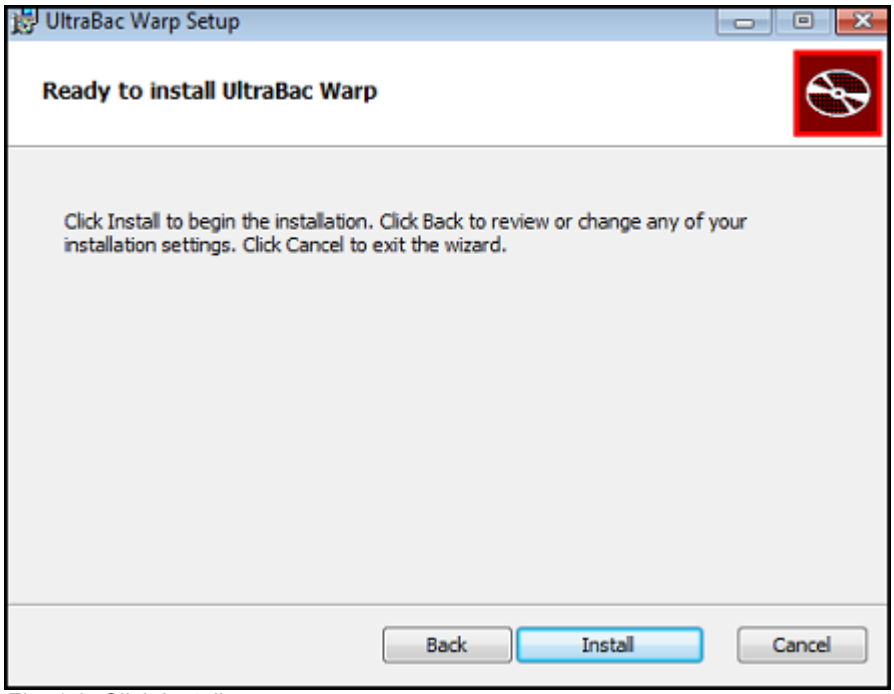

UltraBac Warp Setup
Ready to install UltraBac Warp
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.
Back
Install
Cancel

Fig. 1-8: Click Install.

The following status bar shows the progress of the installation.

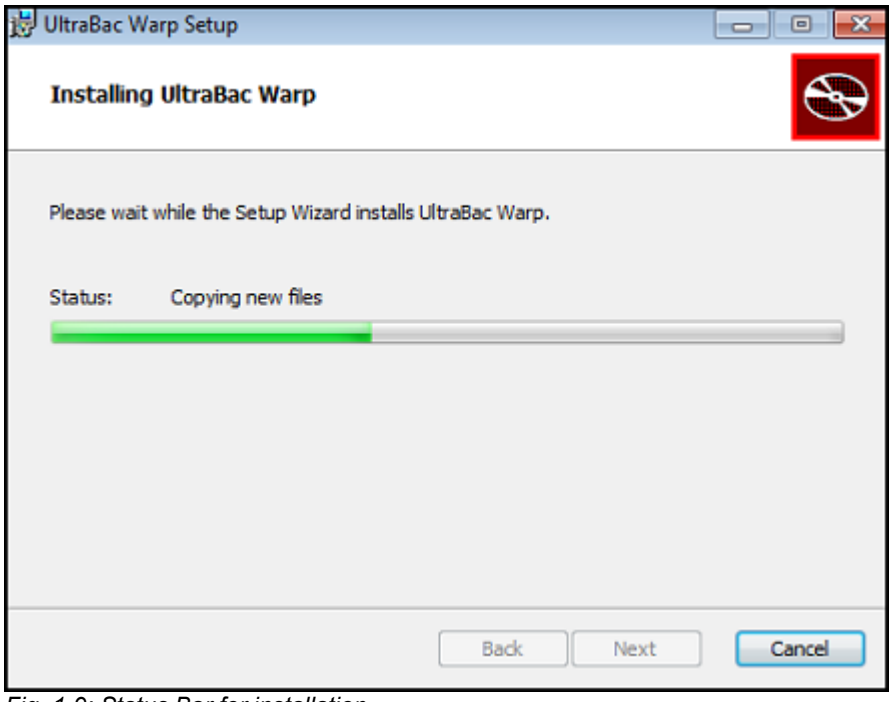


Fig. 1-9: Status Bar for installation.

Once UltraBac Warp is installed, click "Finish" to exit the Setup Wizard. UltraBac Warp is now successfully installed on the computer and ready to be used.

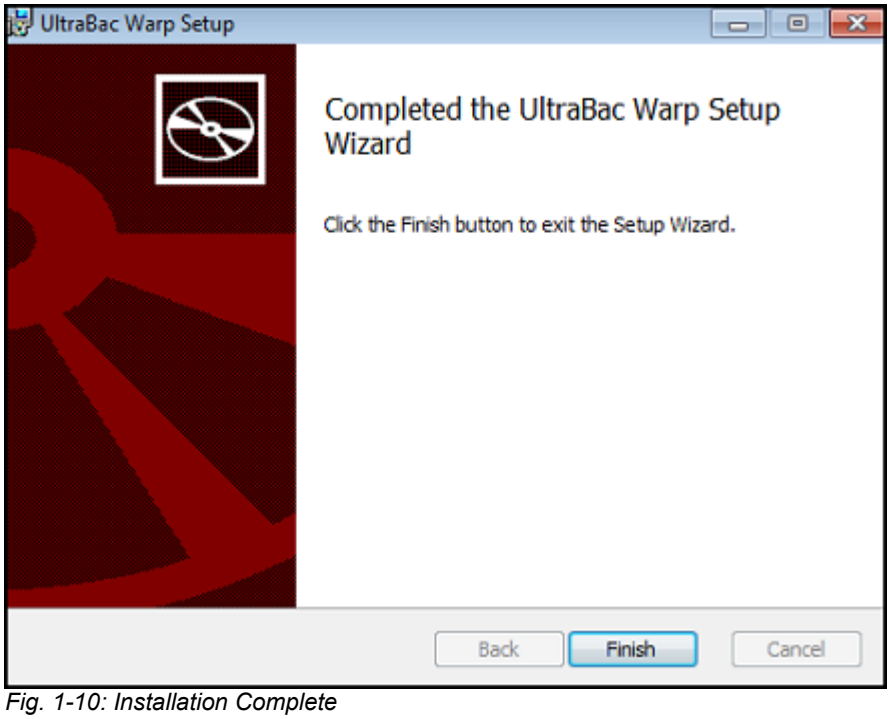


Fig. 1-10: Installation Complete

Uninstallation

UltraBac Warp can be uninstalled from the system using the Control Panel of your Windows operating system. First click "Start" on the Windows taskbar, then click "Control Panel".

Under "Program" group select "Uninstall a Program". Locate UltraBac Warp in the list, select it, and then click "Uninstall" or double click the entry.

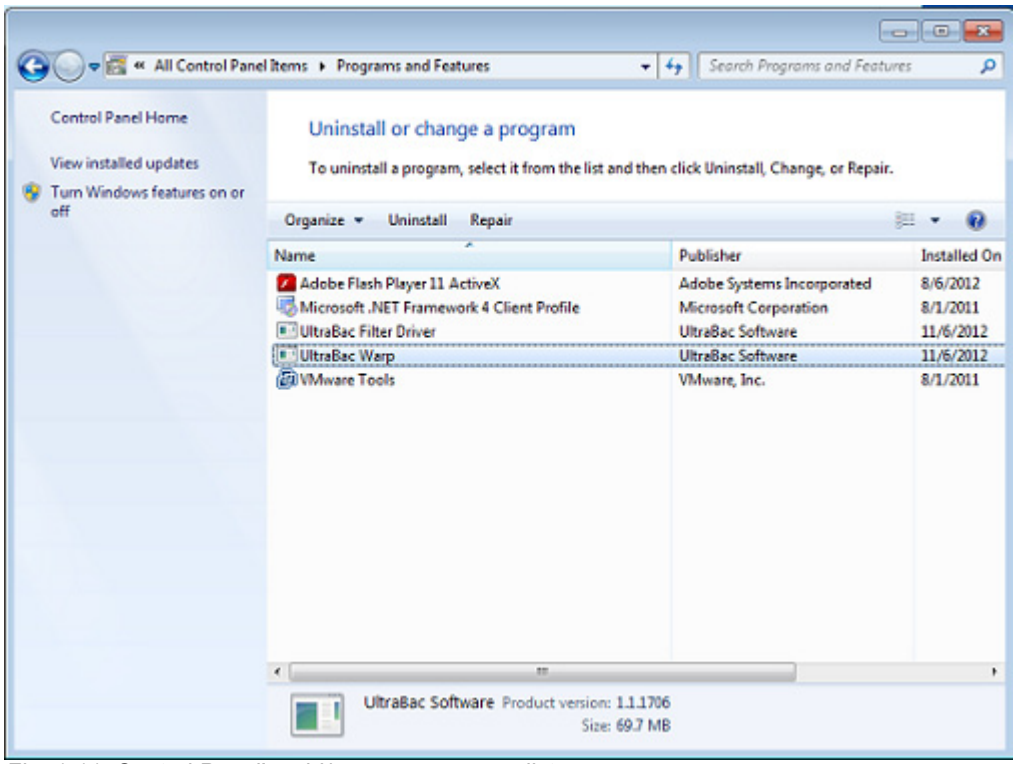


Fig. 1-11: Control Panel's add/remove programs list.

Click "Yes" on the confirmation box to uninstall UltraBac Warp from your computer.

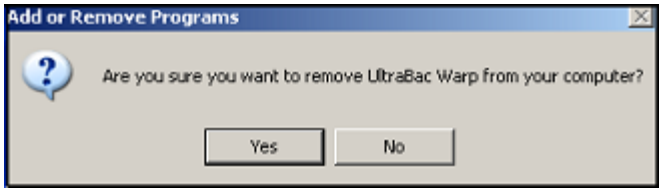


Fig. 1-12: Confirmation box.

A status bar will show the progress of uninstalling the program.

Similarly, uninstall the UltraBac Filter Driver so UltraBac Warp will be completely uninstalled from the computer. Select "UltraBac Filter Driver" from the list and click "Uninstall".

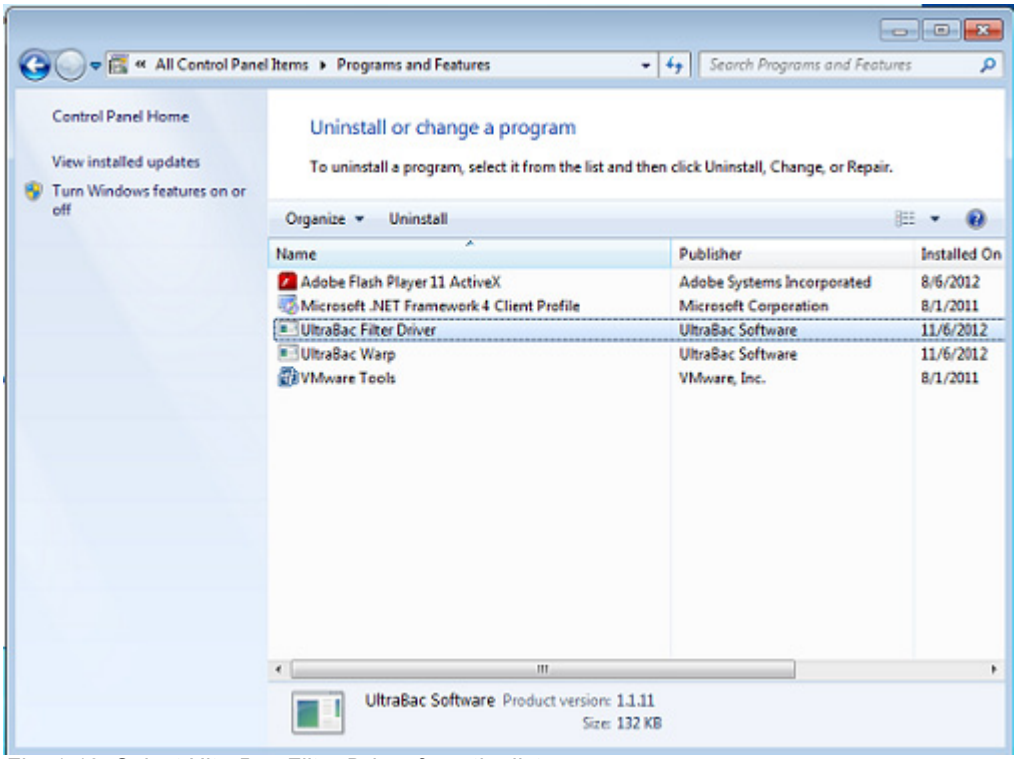


Fig. 1-13: Select UltraBac Filter Driver from the list.

Click "Yes" on the confirmation box to uninstall.

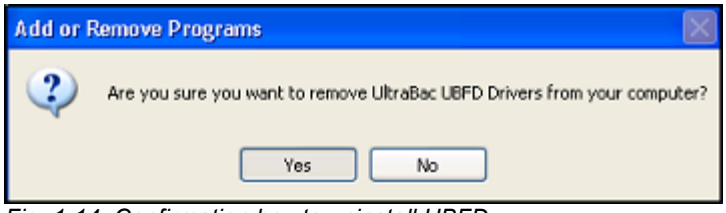


Fig. 1-14: Confirmation box to uninstall UBFD.

A status bar will show the progress of uninstalling the UltraBac Filter Driver.

Your computer must be rebooted before all the changes will take place and UltraBac Warp is completely uninstalled from the system. Click "Yes" to restart, or "No" to manually do it later.

Licensing

You can buy a new license or renew an existing license using the following steps via the UltraBac Warp User Interface.

On the Main Screen click "Settings".

Fig. 2-1: Licensing Settings.

Click on "Licensing..." to renew the existing license or buy a new one.

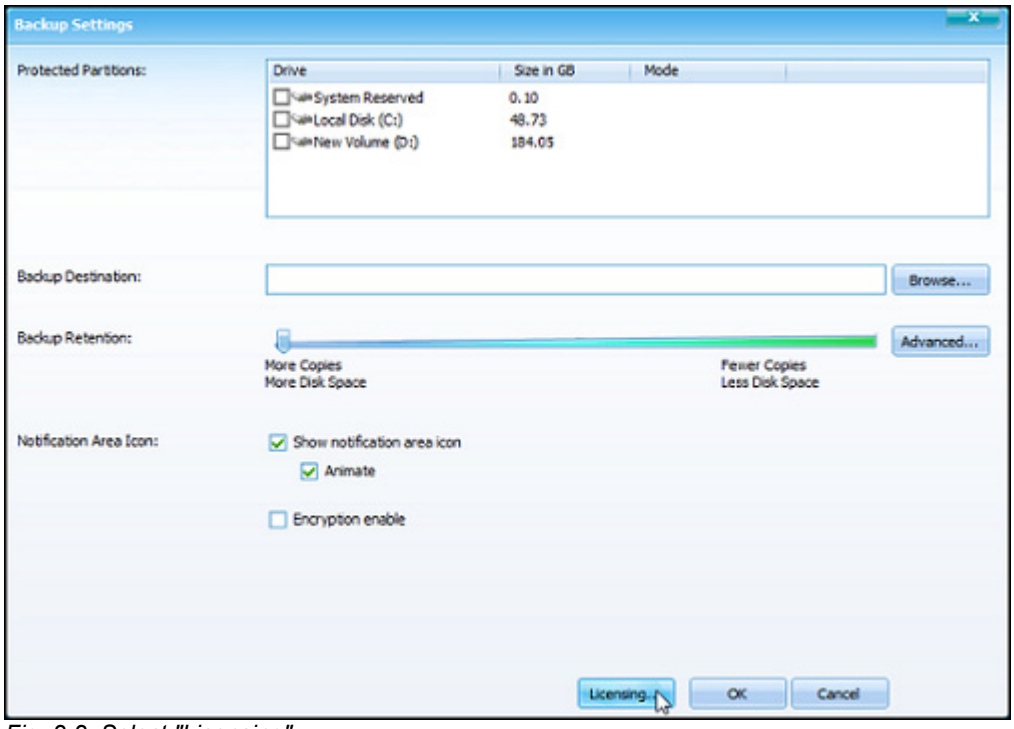


Fig. 2-2: Select "Licensing".

UltraBac Warp gives you **three** options as shown in figure 2-3.

Option 1: Get license from UltraBac license server

Please Note: This option is for those users with an UltraBac Backup & Discovery Recovery product license server already in their network and who purchase an agent license for UltraBac Warp.

Step 1: Select "Get license from UltraBac license server" and click "Next".

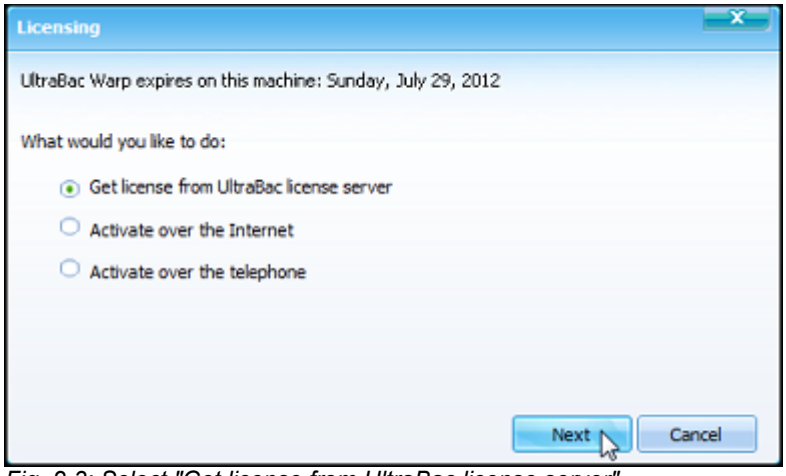

Licensing
UltraBac Warp expires on this machine: Sunday, July 29, 2012
What would you like to do:
Get license from UltraBac license server
Activate over the Internet
Activate over the telephone
Next
Cancel

Fig. 2-3: Select "Get license from UltraBac license server".

Step 2: Type your UltraBac license server name in the given text field as shown in figure 2-4. Click "Get License".

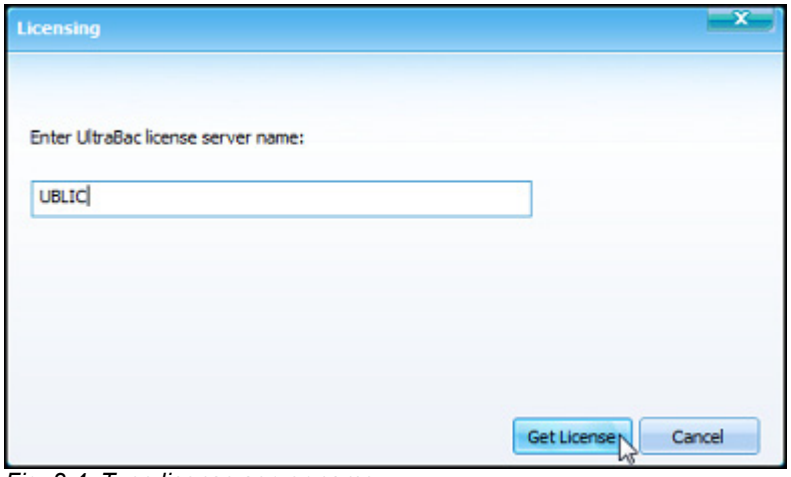


Fig. 2-4: Type license server name.

Step 3: *UltraBac Warp License status* dialogue box is displayed saying "License has been activated successfully" as seen in figure 2-5. The license activated using UltraBac license server name (ex: UBLIC) is **permanently** activated. Click "OK".

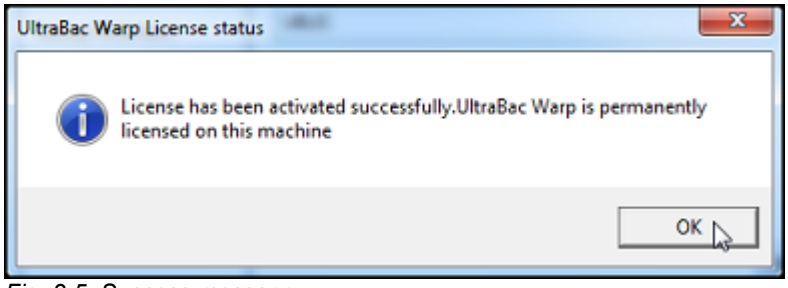

UltraBac Warp License status
License has been activated successfully.UltraBac Warp is permanently licensed on this machine
OK

Fig. 2-5: Success message.

Step 4: Once the License has been activated and you hit "OK" it will take you back to the Licensing screen. At the Licensing screen, click "Cancel" since the license has already been imported.

Option 2: Activate over the Internet

Step 1: Select "Activate over the Internet" and click "Next".

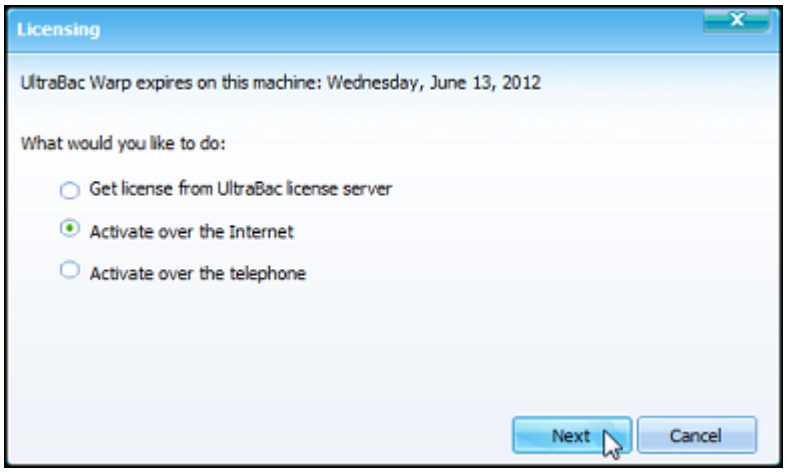

Licensing
UltraBac Warp expires on this machine: Wednesday, June 13, 2012
What would you like to do:
Get license from UltraBac license server
Activate over the Internet
Activate over the telephone
Next
Cancel

Fig. 2-6: Select "Activate over the Internet".

Step 2: Type the Serial number and click "Activate" to activate the license.

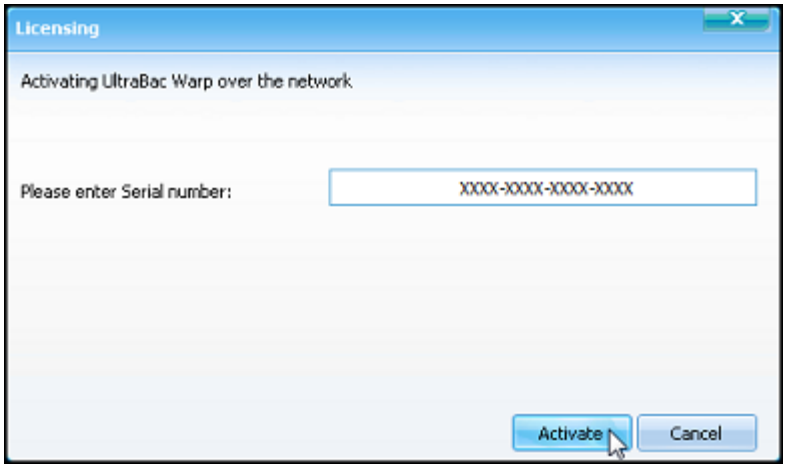


Fig. 2-7: Type Serial number and click "Activate".

Step 3: *UltraBac Warp License status* dialogue box is displayed saying "License has been activated successfully" as seen in figure 2-8. The license activated using "Activate over the Internet" is **permanently** activated. Click "OK".

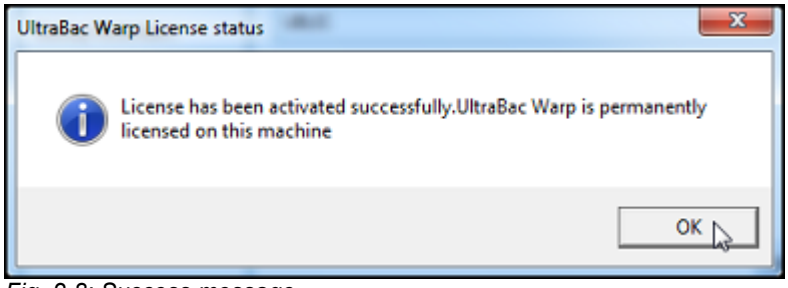

UltraBac Warp License status
License has been activated successfully.UltraBac Warp is permanently licensed on this machine
OK

Fig. 2-8: Success message.

Step 4: Once the License has been activated and you hit "OK" it will take you back to the Licensing screen. At the Licensing screen, click "Cancel" since the license has already been imported.

Option 3: Activate over the telephone

Select "Activate over the telephone". Activating a license over the telephone gives you **two** choices: one is Extension of Evaluation and the other is Permanent License.

Please Note: You will need to provide your name and email address, in addition to the Authorization Code, to the Sales Representative. Your Extension / Permanent License Code may take up to 3 business days to be emailed to you.

Extension of Evaluation

Step 1: Select "Extension of Evaluation" and click "Next".

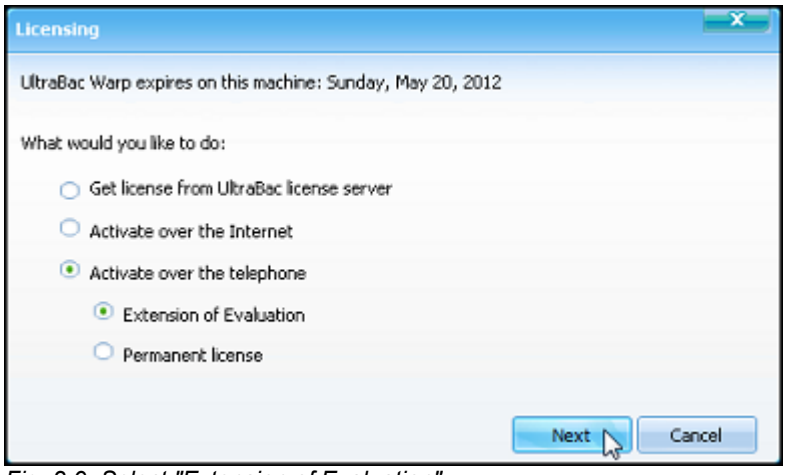


Fig. 2-9: Select "Extension of Evaluation".

Step 2: To extend the evaluation version, type the Extension Code and click "Extend" to activate the license. To get the Extension Code, you will need to provide the auto-generated Authorization Code to the Sales Representative over the telephone. This Authorization Code is in the first box as seen in figure 2-10.

Use the following telephone number to speak to a Sales Representative:
USA +1 (425) 644-6000

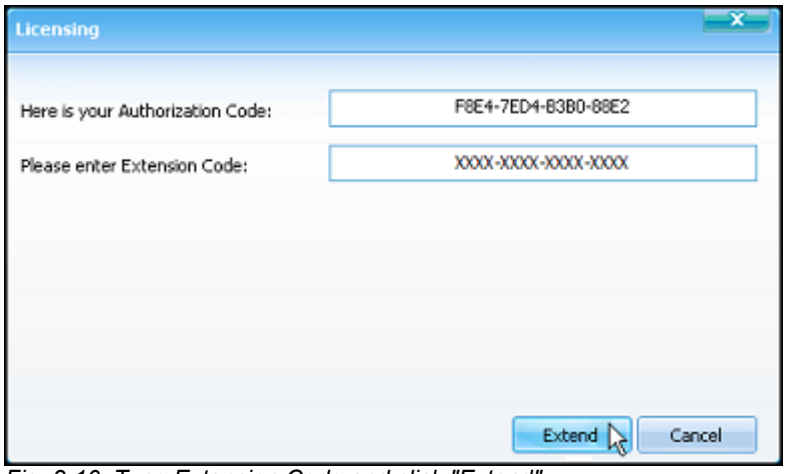


Fig. 2-10: Type Extension Code and click "Extend".

Step 3: The *UltraBac Warp License status* dialogue box is displayed saying "License has been activated successfully" as seen in figure 2-11. Click "OK".

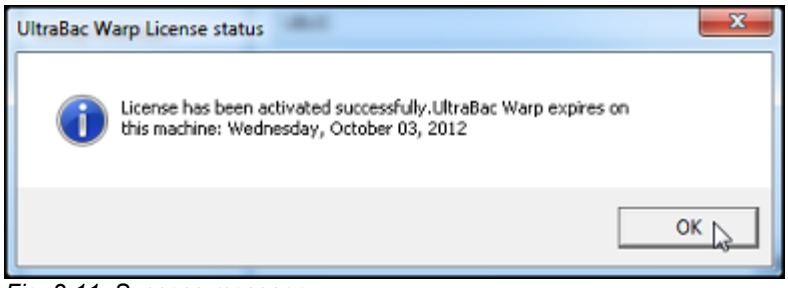

UltraBac Warp License status
License has been activated successfully.UltraBac Warp expires on this machine: Wednesday, October 03, 2012
OK

Fig. 2-11: Success message.

Step 4: Once the License has been activated and you hit "OK" it will take you back to the Licensing screen. At the Licensing screen, click "Cancel" since the license has already been imported.

Permanent License

Step 1: To activate a Permanent license over the telephone, select "Permanent license" and click "Next".

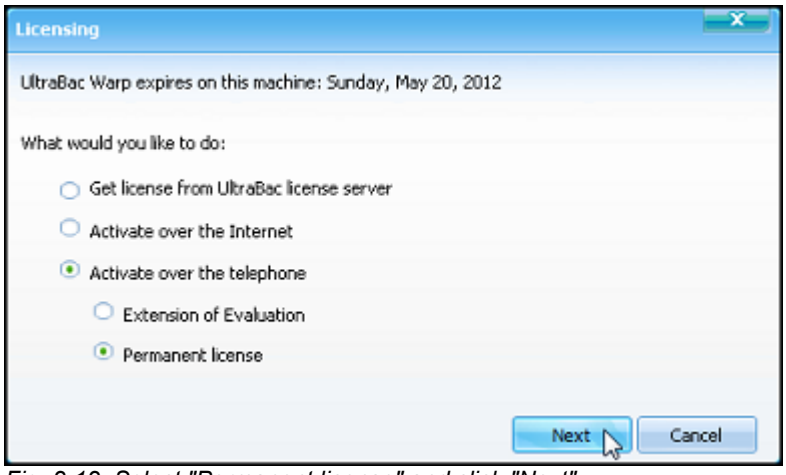


Fig. 2-12: Select "Permanent license" and click "Next".

Step 2: Type the License Code and click "Activate". To get the License Code you will need to provide the auto-generated Authorization Code to the Sales Representative over the telephone. This Authorization Code is in the first box as seen in figure 2-13.

Use the following telephone number to speak to a Sales Representative:
USA +1 (425) 644-6000

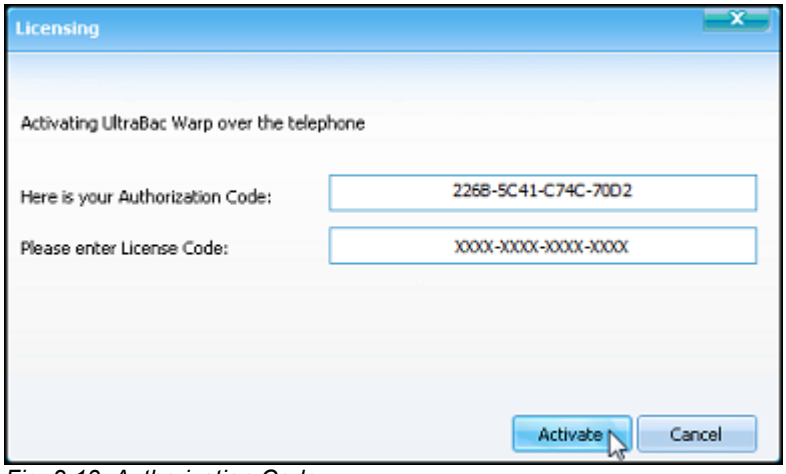


Fig. 2-13: Authorization Code.

Step 3: The *UltraBac Warp License status* dialogue box is displayed saying "License has been activated successfully" as seen in figure 2-14. Click "OK"

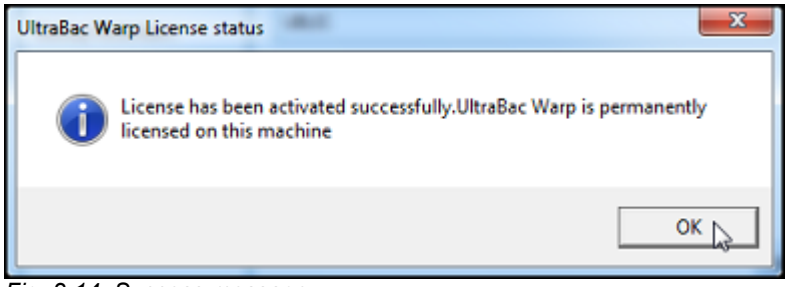

UltraBac Warp License status
License has been activated successfully.UltraBac Warp is permanently licensed on this machine
OK

Fig. 2-14: Success message.

Step 4: Once the License has been activated and you hit "OK" it will take you back to the Licensing screen. At the Licensing screen, click "Cancel" since the license has already been imported.

Migrating a Permanent License to a new computer

A permanent license (Serial Number) that has already been activated on a computer can be deactivated and then reactivated on a new one. In order to deactivate the permanent license from a computer, the computer simply needs to be connected to the Internet while uninstalling UltraBac Warp. During the uninstall process, UltraBac Warp deactivates the permanent license through the license activation server. Once the permanent license has been deactivated, simply install UltraBac Warp on a new computer and run through the activation process again utilizing the saved Serial Number used during the initial install.

Further Licensing Information

1. You can obtain a free 30 day evaluation copy of UltraBac Warp from either UltraBac Software's Web site, www.ultrabac.com, or by purchasing a CD.
2. A permanent license can be purchased over the Internet or via telephone. A permanent license can be purchased at any time while the evaluation version is running, or even after it has expired.
3. A license key can have one or a number of activations depending on the type of license bundle purchased.
4. An evaluation license can be extended at any time, even after it has expired.
5. Once a particular key expires on a computer, it cannot be reused again on that computer. If an additional extension is needed, a new extension code must be generated.

Backup

UltraBac Warp provides full protection of your data. Full protection consists of a full backup and Continuous Image Protection ™ (CIP™). This section deals with the protection functionality. It helps you to bring devices under protection, start protection, create and manipulate backup sets, add bookmarks, and so on.

After successfully installing UltraBac Warp on the computer, follow the steps outlined below to start the application.

Step 1: Click "Start" from the task bar.

Fig. 3-1: Click "Start".

Step 2: Click "All Programs".

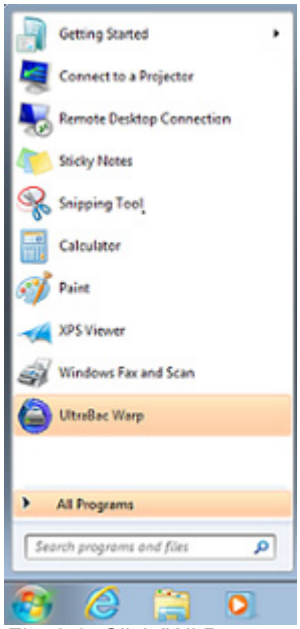


Fig. 3-2: Click "All Programs".

Step 3: Select "UltraBac Warp".

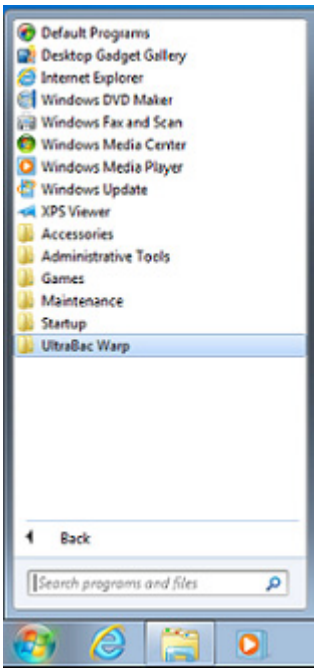


Fig. 3-3: Select "UltraBac Warp".

Step 4: Click "UltraBac Warp".

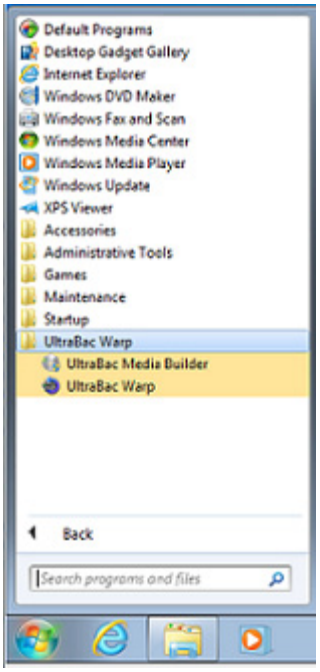


Fig. 3-4: Click "UltraBac Warp".

After clicking "UltraBac Warp", you will see the main screen as seen in figure 3-5.

Fig. 3-5: Main screen.

UltraBac Warp can be used to achieve both:

Backup
Restore

Under **Backup** group we have two features:

Settings - to start protection.
Bookmark - to add a Bookmark for the current time.

Settings

This component defines the protection process for the selected volume(s). It creates the backup set for protection, selects the desired backup destination, and specifies the retention, pruning, and encryption settings.

On the main screen, under the Backup group, click "Settings".

Fig. 3-6: Click "Settings".

The following screen is displayed.

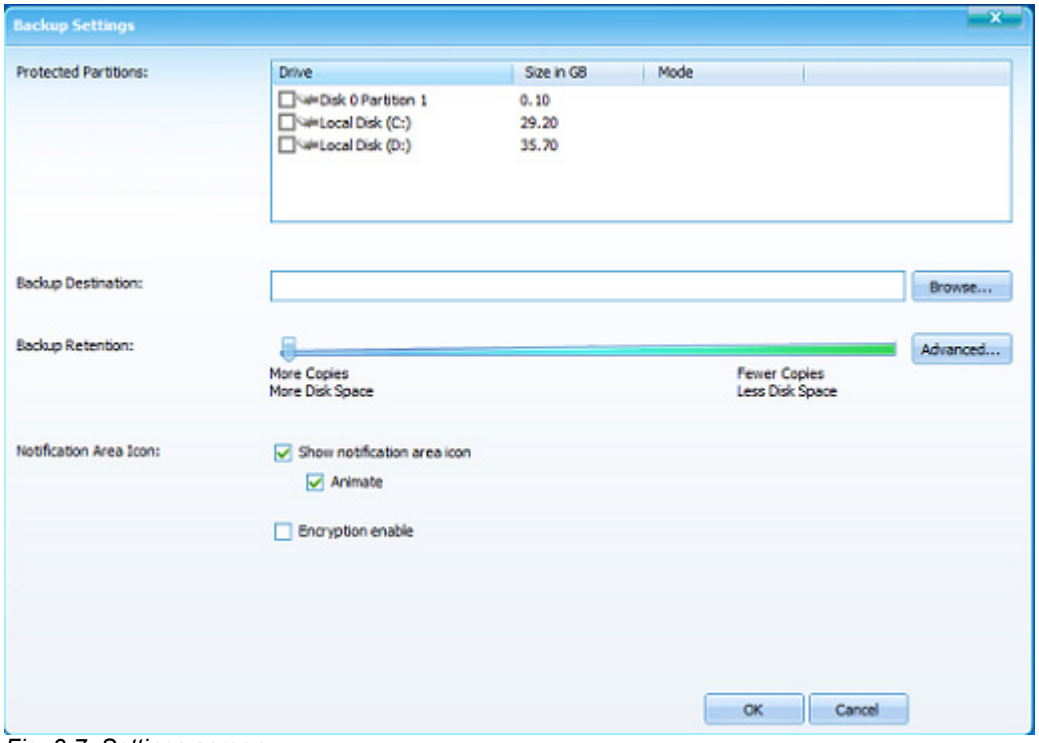


Fig. 3-7: Settings screen.

Create a Backup Set

A backup set is a set of all the partitions (volumes) that you want to bring under the protection of UltraBac Warp. The following examples are of the System Reserved (boot) and Operating System (OS) partitions. The same procedures will be used for doing non-OS data partitions as well. To create a backup set perform the following steps.

Please Note: In order to do a Bare Metal Restore of Windows Vista and later operating systems (addressed later in the manual), the 100 MB System Reserved (boot) partition must also be in the backup set.

Step 1: Select the partitions to be added to the backup set from the list provided by checking the respective check box; you may select multiple partitions. You will see the status (Mode) of the chosen partitions change to "Protected".

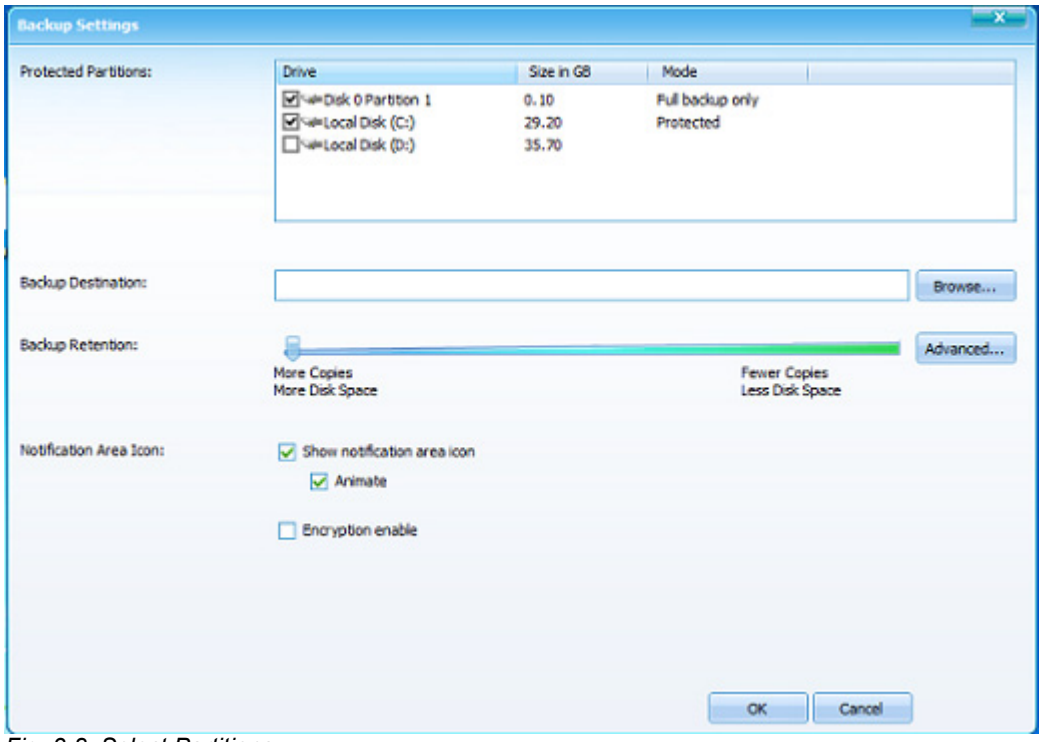


Fig. 3-8: Select Partitions.

Step 2: Either type the desired backup destination in the Backup Destination text box or click "Browse..." to search and select the desired destination. The backup destination cannot be a partition that is in the backup set.

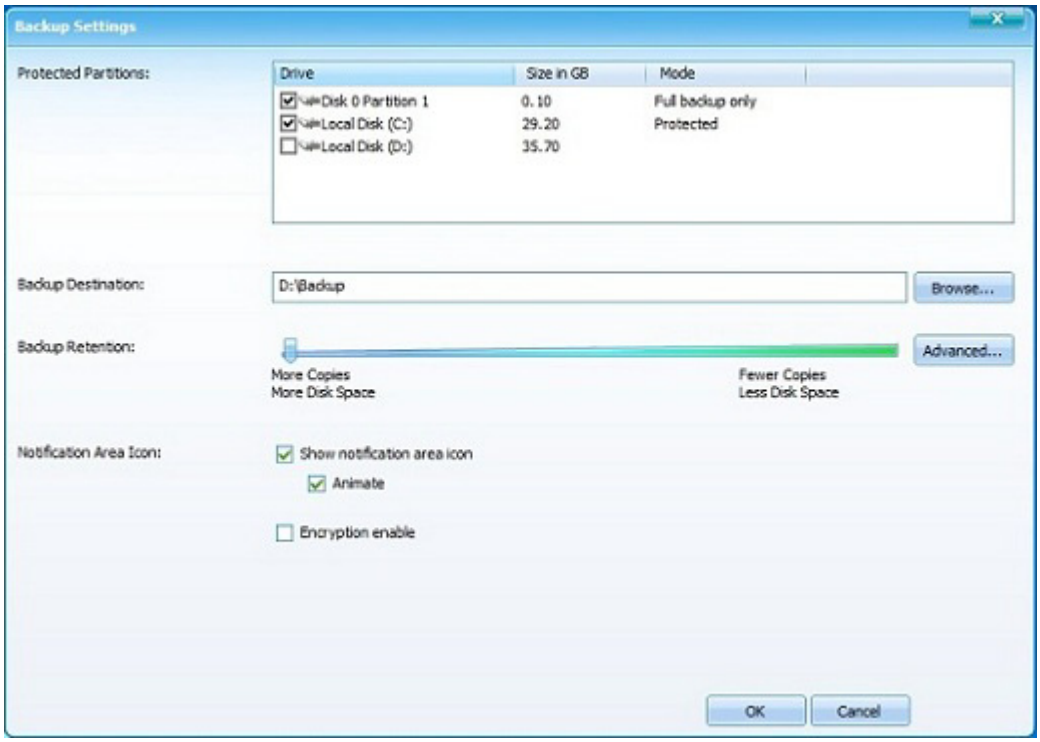


Fig. 3-9: Type Backup Destination path.

When choosing your backup destination, make sure that the destination has adequate space for the full backup and CIP backups. UltraBac Warp uses compression for its backup files, but the compression ratio varies depending upon the file type.

- If there is not enough space on the backup destination for the full backup, a prompt will appear stating that there is not enough space on the backup destination before the full backup starts.
- If the backup destination does not have enough space after the full backup has already started (e.g. other files being written to the same partition from another application), the full backup will fail when the partition runs out of space.
- If the backup destination becomes full after the full backup has already completed and CIP backup has begun, than CIP will go into Pause mode until more space on that partition is made available. CIP can be resumed by clicking on the Resume button (addressed later in the manual).

If you prefer a backup destination on your Local Area Network, specify a UNC Path in the Backup Destination text box as seen in the figure below. In this case you will need to provide the user name and password of the computer you want to set as the backup destination.

Fig. 3-10: Backup Destination - UNC Path.

Please Note: If you need to specify a share on a remote system that requires authentication, the path must be typed into the "Backup Destination" text box and an authentication window will pop up when you hit the "OK" button as seen later in Step 7; the "Browse..." button will not bring up the authentication window. This is a known bug and will be fixed in the next release of UltraBac Warp.

Step 3: Backup Retention

Backup Retention is the saving of backed up data for only a limited length of time (as per the policy selected). This function helps you to set the **Retention Policy** for the backup set. Retention Policies automatically remove backup data that has exceeded its retention date as per policy. There are **four** Retention Policies from which you can select your preference.

If you select Retention Policy 1, it will consume more space compared to Retention Policy 2 because of its requirements to store changes for a longer period of time. Similarly, Retention Policy 2 will consume more space compared to Retention Policy 3, and so on.

Retention Policy 1

- 1 week -- unlimited granularity
- next 4 weeks -- hourly granularity
- next 52 days -- daily granularity
- remaining -- weekly granularity

Retention Policy 2

- 3 day -- unlimited granularity
- next week -- hourly granularity
- next 12 weeks -- daily granularity
- remaining -- weekly granularity

Retention Policy 3

- 2 day -- unlimited granularity
- next week -- hourly granularity
- next 4 weeks -- daily granularity
- remaining -- weekly granularity

Retention Policy 4

- 1 day -- unlimited granularity
- next 3 days -- hourly granularity
- next 2 weeks -- daily granularity
- remaining -- weekly granularity

To select a **Retention Policy**, click on the Retention Bar as shown in the Backup Retention Bar of figure 3-11. UltraBac Warp selects Retention Policy 1 by default as seen in figure 3-8. To see information about each Retention Policy, move the slider bar to the desired setting and left click over the bar.

Fig. 3-11: Setting up the Retention Policy.

Step 4: Pruning Setting

The pruning hour is the daily time at which backed up data that has been saved using your retention policy is automatically pruned according to that policy. You can set the pruning hour by clicking "Advanced...", then use the down arrow to select the time at which you want to run the pruning function, and click "OK". UltraBac Warp selects the pruning hour at 2 a.m. by default as shown in figure 3-12.

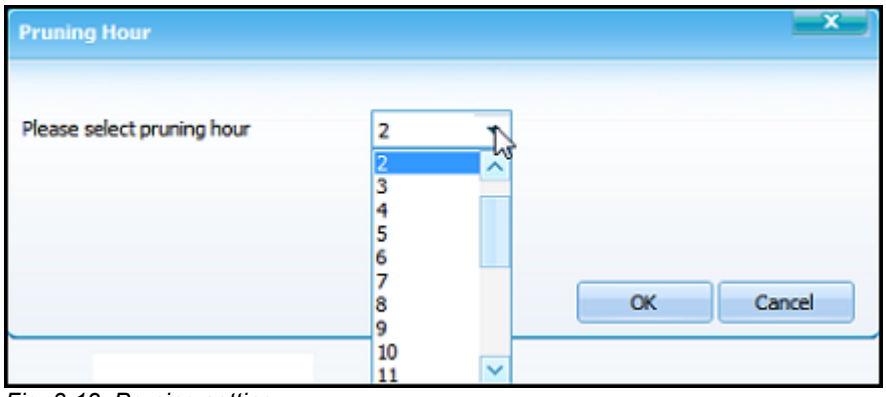


Fig. 3-12: Pruning setting.

Step 5: Enable Encryption

Enable encryption is an optional function that allows you to control whether you encrypt your backup set or not. To enable encryption, click in the check box as seen in figure 3-13. After selecting the check box, you will be able to type an encryption key in the Encryption Key text box. The encryption key should be a maximum of 16 characters, which can be a combination of letters, numbers, and special characters.

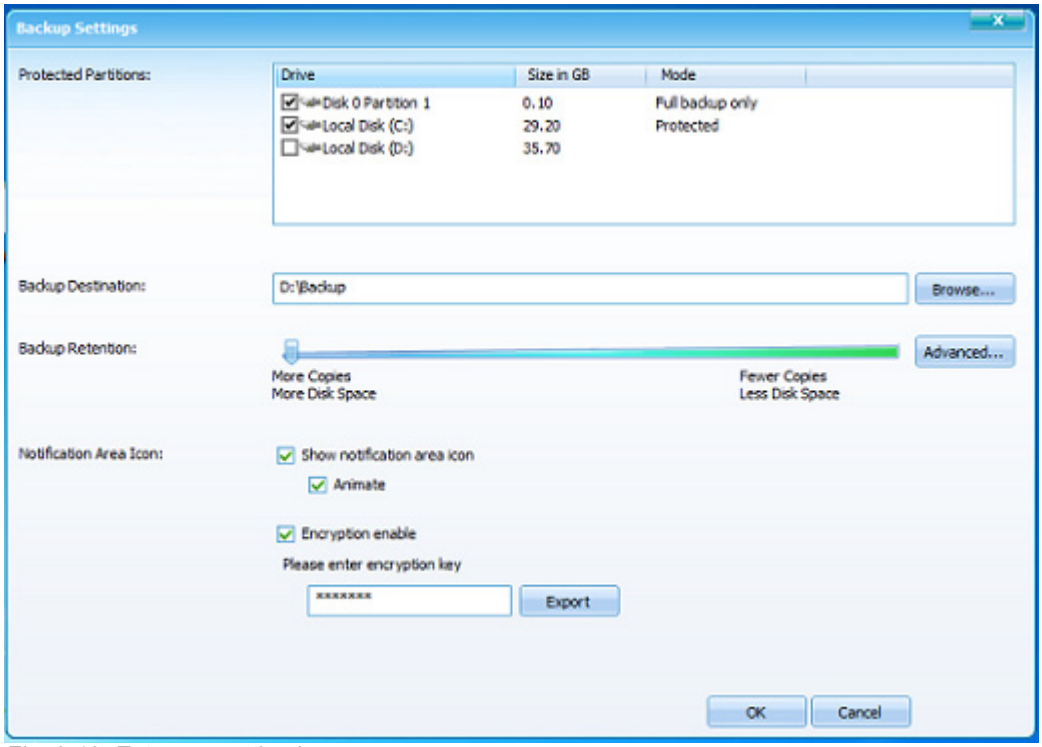


Fig. 3-13: Enter encryption key.

Exporting the encryption key you have created is also an optional function. Click "Export" to export the encryption key. You have two options to export the encryption key: one is to a Local path and the second is to a UNC path. For a UNC path you will need the user name and password of the computer for the UNC path you have selected.

Upon clicking "Export", a *Save As* dialogue box is displayed. Browse for the folder you would like to export the encryption key to. Type the appropriate file name in the File name text box and click "Save" as seen in figure 3-14.

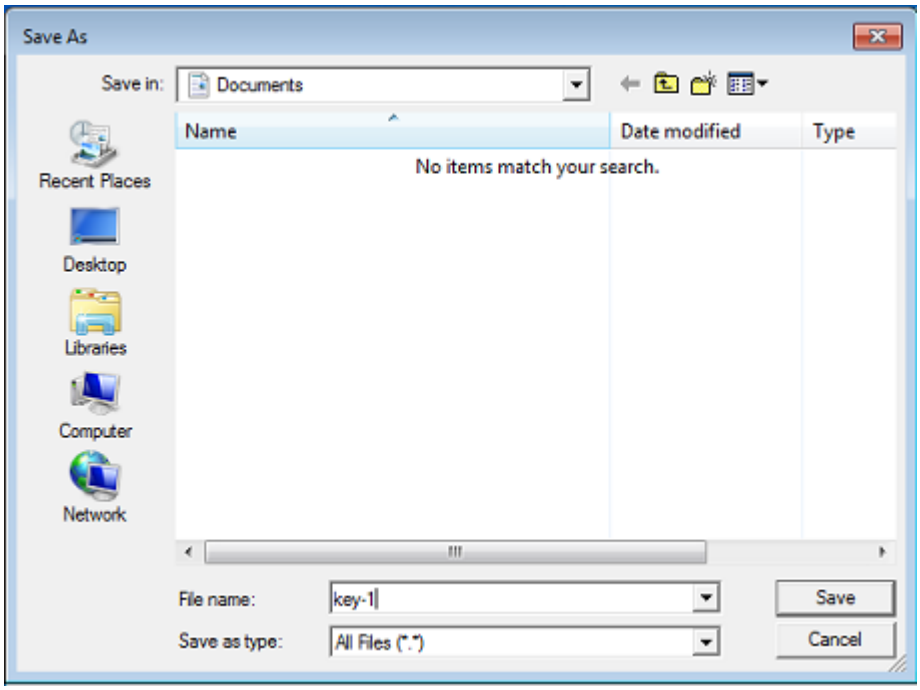


Fig. 3-14: Browse for the appropriate folder and click "Save".

A success message is then displayed saying "Exported key successfully" as seen in figure 3-15. Click "OK".

Fig. 3-15: Success message - click "OK".

Step 6: Click "OK" to create the backup set.

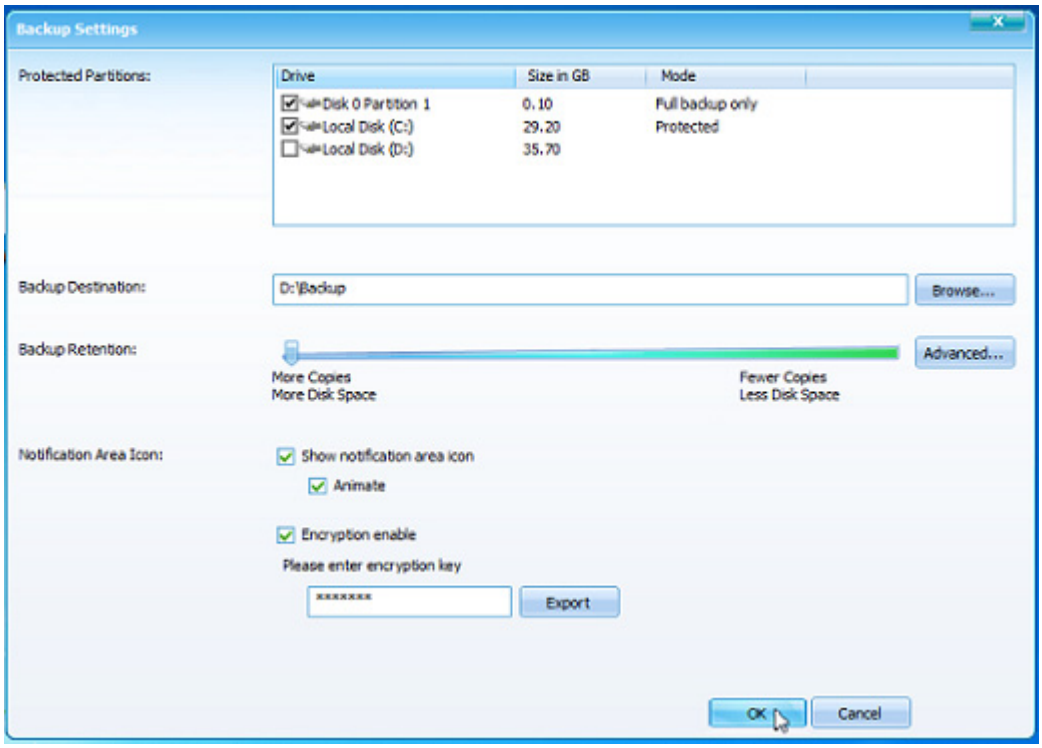


Fig. 3-16: Click "OK".

Step 7: If the backup destination you have typed does not exist, an *UltraBac Warp* dialogue box will display to confirm creation of that destination path. Click "Yes".

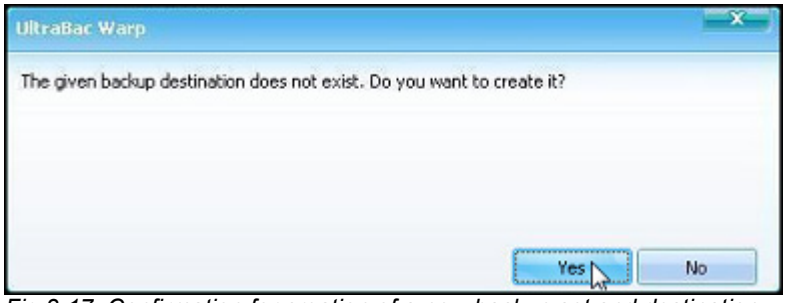


Fig.3-17: Confirmation for creation of a new backup set and destination.

- If the desired destination already contains backup set information, a *Backup Settings* dialogue box appears asking "The destination already contains a backup information for newly protected drive(s). Do you want to overwrite existing backup data?", as seen in figure 3-18. If you want the new files to overwrite the previously stored backup files, click "Continue".

  Warning: Once you overwrite the previously stored backup files, those files are permanently deleted from that location.

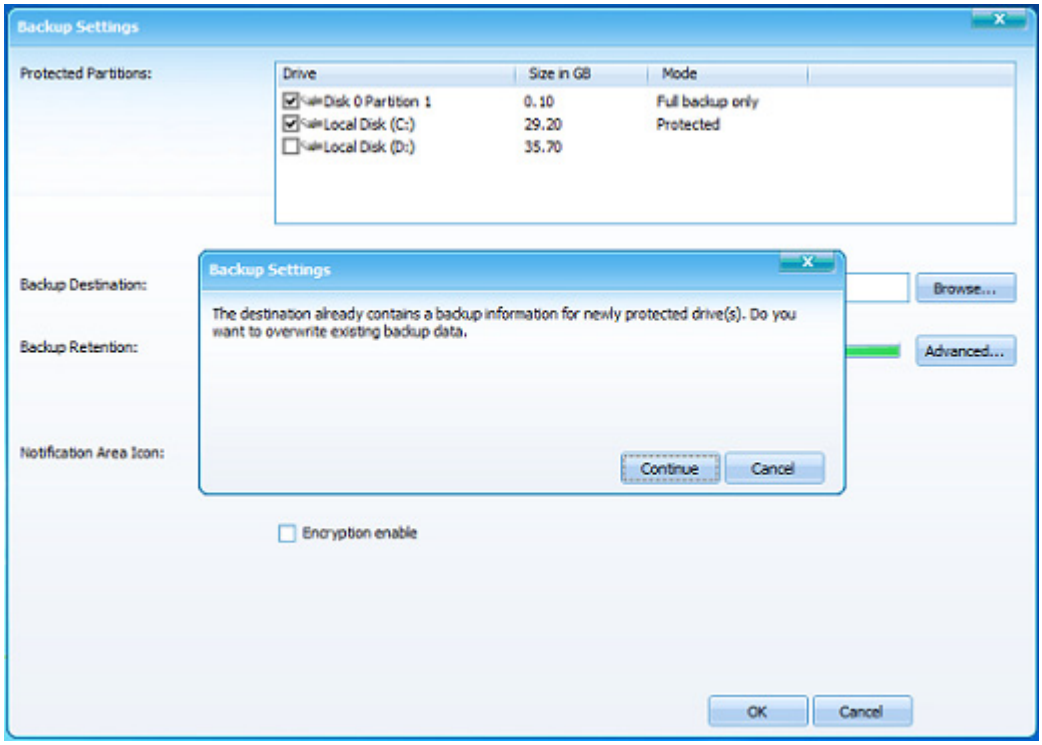


Fig. 3-18: Backup destination already has backup set files.

- When you choose the backup destination to be on a UNC Path, a *Credentials* dialogue box is displayed asking for the user name and password of the computer for the UNC path you have selected, as seen in figure 3-19. Click "OK".

Please Note: In order to avoid data loss and failure during the restoration process, you should not rename or delete the backup destination path once it is created

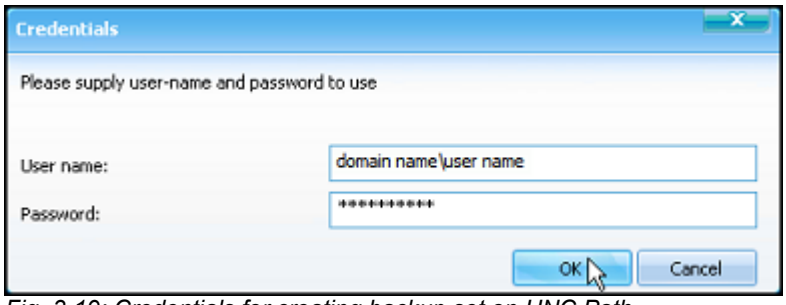


Fig. 3-19: Credentials for creating backup set on UNC Path

Please Note: The main screen will continue to say "Please configure Backup Settings" until protection is started. The backup set is not permanently saved until the Start Backup button is clicked in the Start Protection section.

Start Protection

After a backup set has been created, you can start the backup process by performing the following steps:

Step 1: You will see the main screen once the backup set has been created as seen in figure 3-20.

Step 2: Click the "Start backup" button to begin the protection process.

Please Note: In the 64-bit version, the "Start" button appears as "***Start/Pause***". This is a known bug and will be fixed in the next release.

Fig. 3-20: Start protection.

The Start button now changes to Pause, as seen in figure 3-21. The backup set that has been created is seen along with the CIP graph and other components. Starting a backup using the protection process creates a full backup of all selected drives followed by CIP.

Fig. 3-21: CIP graph.

Pause Protection

This function allows you to pause, or temporarily halt, the protection process while it is in progress. Perform the following to pause the protection process:

After successfully starting the protection process, you will see two buttons below the CIP graph: Pause and Stop. Click the "Pause" button to pause the protection process.

Please Note: In the 64-bit version, the "Pause" button appears as "***Start/Pause***". This is a known bug and will be fixed in the next release.

The Pause button now changes to Resume. The color of the graph changes to show that protection has been paused, as seen in figure 3-22.

Fig. 3-22: CIP paused.

Please Note: You cannot pause the backup while a Full Backup is in progress. The program will pop up a warning message saying "Full Backup is in progress" as seen in figure 3-23.

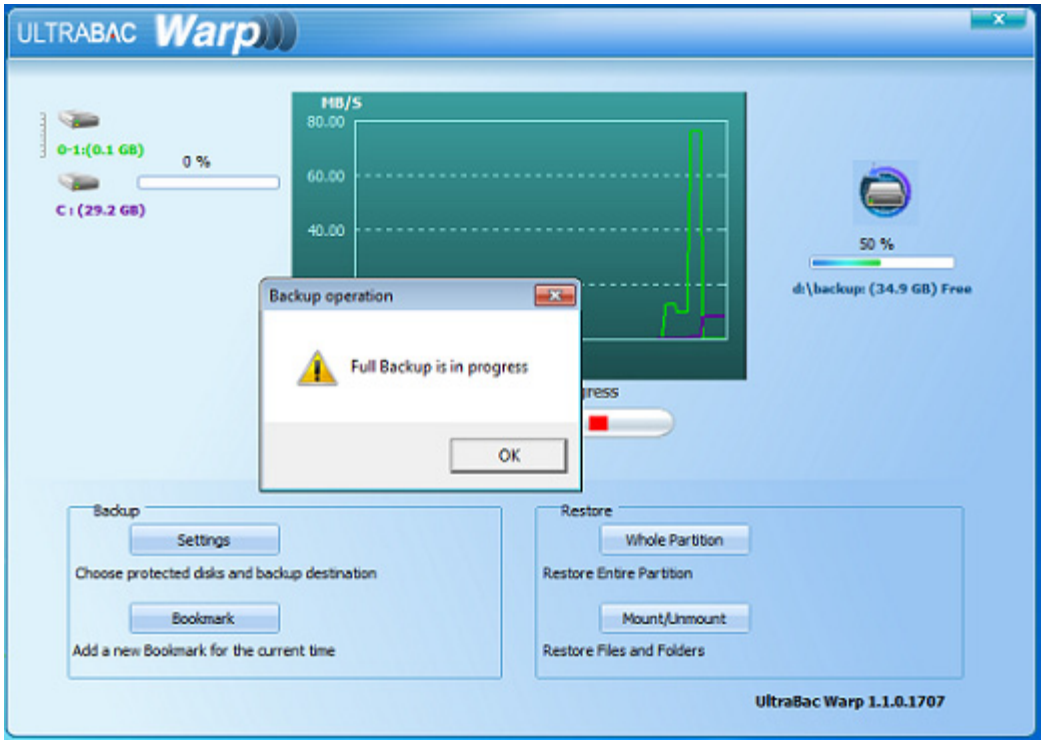
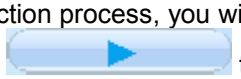


Fig. 3-23: Pop up warning appears when attempting to pause during Full Backup.

Resume Protection

This function allows you to resume or restart the protection process when it has been paused. The resume process will protect all the updated data after which the backup process was paused.

After successfully pausing the protection process, you will see that the earlier Pause button has turned to Resume. Click the "Resume" button  to resume the protection process.

Please Note: In the 64-bit version, the "Resume" button appears as "***Start/Pause***". This is a known bug and will be fixed in the next release.

Fig. 3-24: Click the Resume button.

The Resume button now changes back to Pause and the color of the graph changes back as the protection process is resumed, as seen in figure 3-25.

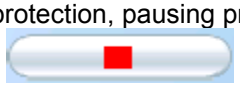
Fig. 3-25: CIP Graph.

Auto Pause - Resume Functionality

When the full backup is completed and CIP is running, there can be many reasons the backup destination becomes unavailable: the backup destination is not reachable, the UNC path is not available, etc. In these instances UltraBac Warp automatically pauses the CIP protection.

Similarly, once the same backup destination is available, UltraBac Warp resumes the CIP protection automatically.

Stop Protection

Stop protection halts the backup process. After successfully starting protection, pausing protection, or resuming the paused protection process, you will find the Stop button  below the graph. Click "Stop" button to stop the protection process.

Please Note: In the 64-bit version, the "Stop" button appears as "***Stop***". This is a known bug and will be fixed in the next release.

Fig. 3-26: Stop button.

The Stop button is now disabled, the protection is stopped, and the backup set is removed from UltraBac Warp, however the backup files remain. The initial screen will then appear, as seen in figure 3-27.

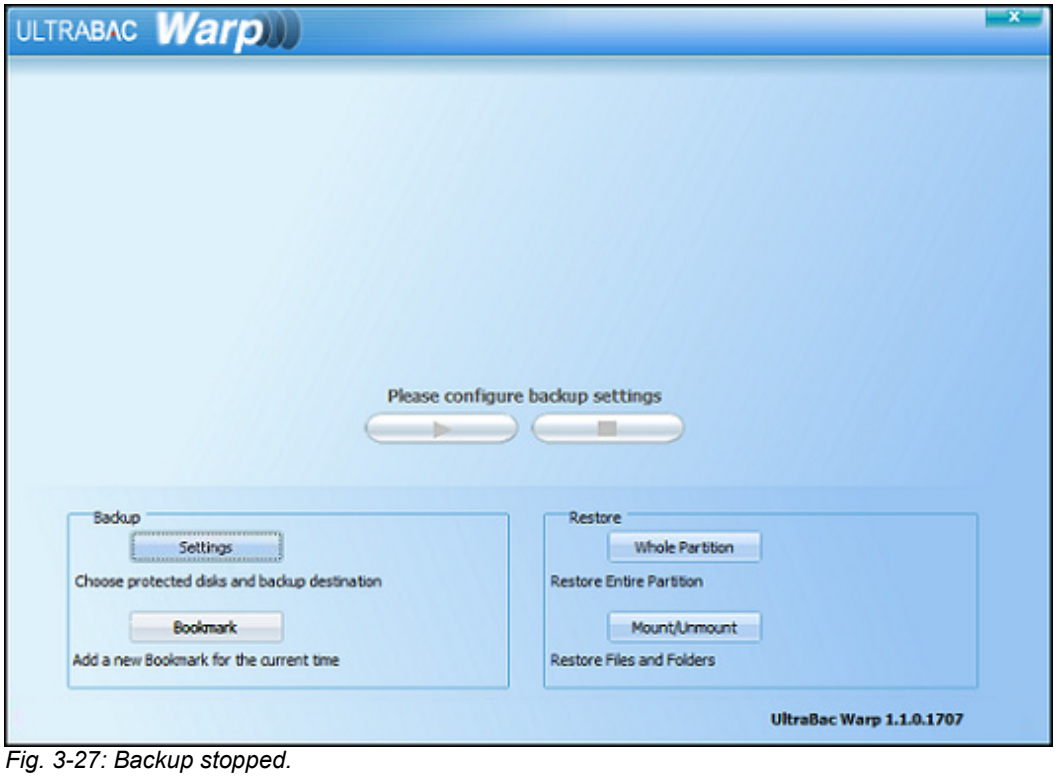


Fig. 3-27: Backup stopped.

Update Backup Set

Update Backup set functionality allows you to add partitions to, or remove partitions from, the backup set. Perform the following steps to update the backup set where CIP is running:

Step 1: On the main screen click "Settings".

Step 2: Check the partitions you want to add to the backup set, and/or uncheck the partitions you want to remove from the backup set.

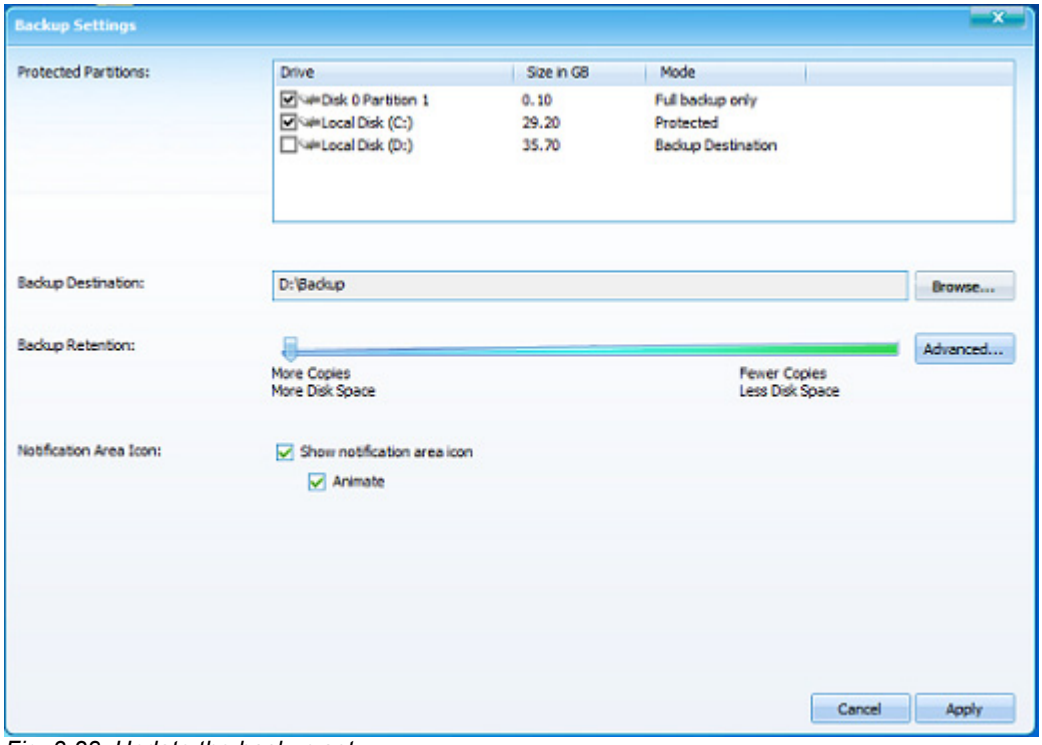


Fig. 3-28: Update the backup set.

Step 3: Click "Apply".

The following conditions hold true for an update:

1. An update cannot be performed while a Full Backup is in progress, as this could result in data being lost.
2. While updating a backup set, the set cannot be empty and a minimum of at least one drive must remain in the backup set.
3. While updating a backup set, existing bookmarks will be deleted.
4. An update cannot be performed on a backup set consisting of only unmounted drives.
5. At any given time a maximum of 23 drives can be protected.

The status on the graph will change after the update has been incorporated.

Fig. 3-29: CIP graph after an update.

Full protection consists of first creating a full backup and then providing CIP. If a set has a combination of mounted and unmounted drives, only the mounted drives get full protection. If only unmounted drives are present in the backup set, protection is STOPPED for the set after full backup.

Bookmark

The bookmark feature allows you to mark a desired point in the protection process and save the state at that instant in time. The bookmark can then be used during the restore process to restore the data up to that point in time. This can be done as an alternative to performing a full restore.

Please Note: The bookmark cannot be added while a Full Backup is running.

To add a bookmark, perform the following steps:

Step 1: Click "Bookmark".

Fig. 3-30: Click "Bookmark".

Step 2: Type the bookmark name in the given text box as seen in figure 3-31. Click "OK".

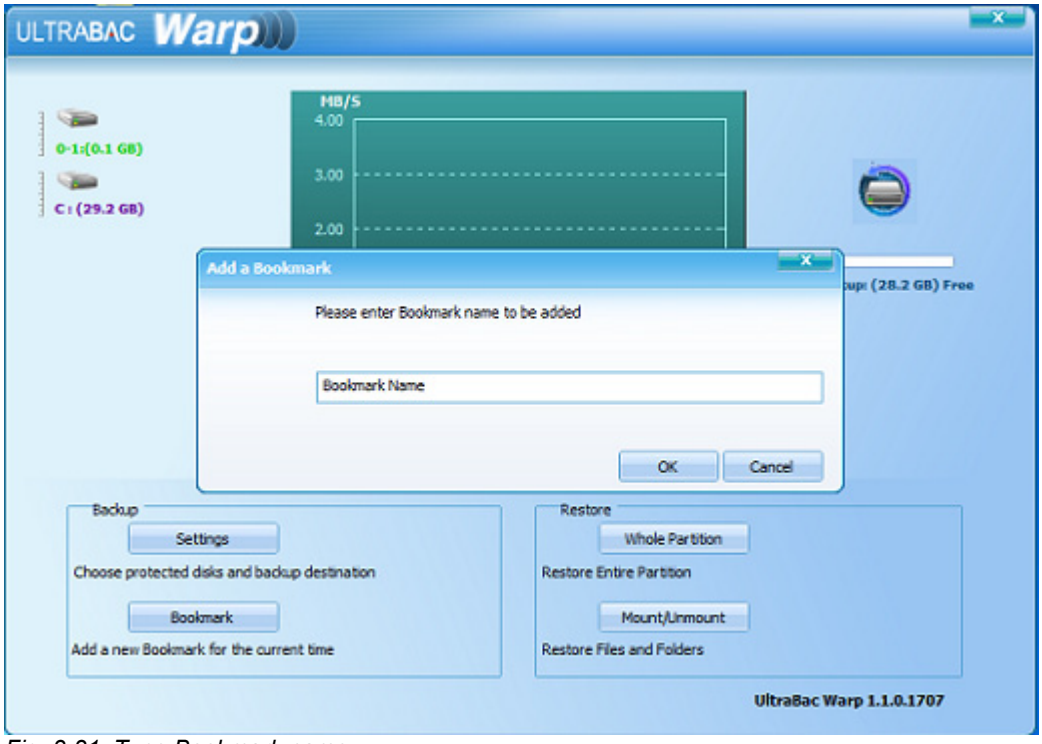


Fig. 3-31: Type Bookmark name.

Step 3: A success message is displayed saying "Bookmark added successfully". Click "OK".

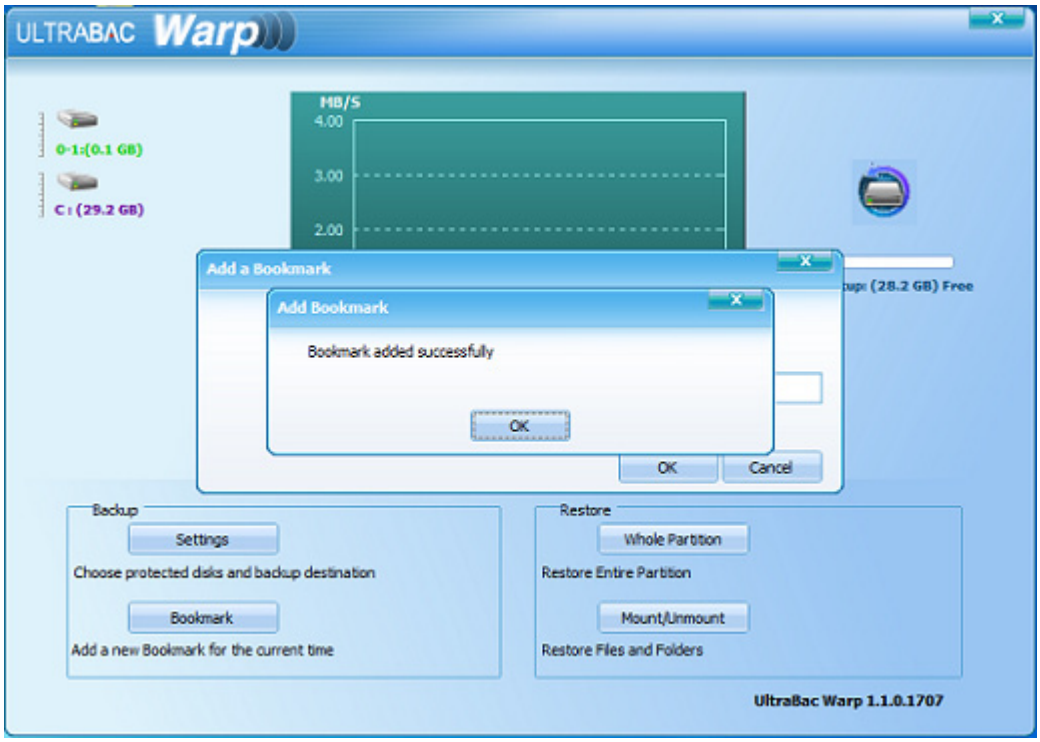


Fig. 3-32: Success message.

Other Features

- A chart of transfer rate versus time is provided for the backup process. The chart becomes active as soon as the protection of the backup set is started and shows a graph for each drive with a matching color code.
- Also provided is a space on the left which contains the current backup set under protection and an icon on the right indicating the space available at the destination.
- If you are protecting more than four drives you will not be able to see all of the protected drives on the same page. UltraBac Warp allows you to view the remaining drives by clicking on the up arrow to go to the next page or by using the down arrow to go back to the previous page as seen in figures 3-33 and 3-34.

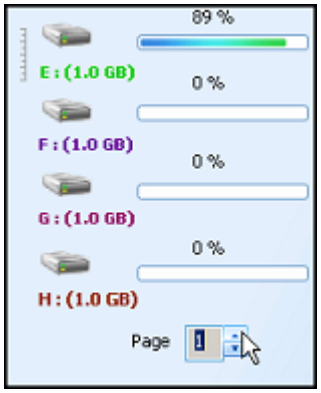


Fig. 3-33: Click the up arrow to view the next page.

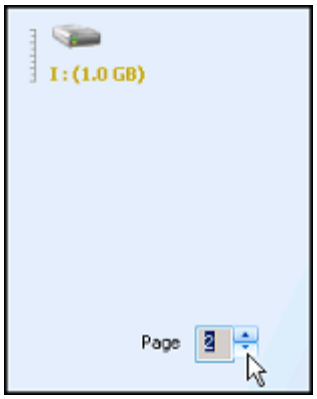


Fig. 3-34: Click the down arrow to return to the previous page.

- The tray icon seen in figure 3-35 provides a shorter and quicker method to perform some of the previously mentioned operations like Pause, Stop, Add Bookmark, along with Starting and Exiting the Graphical User Interface (GUI).

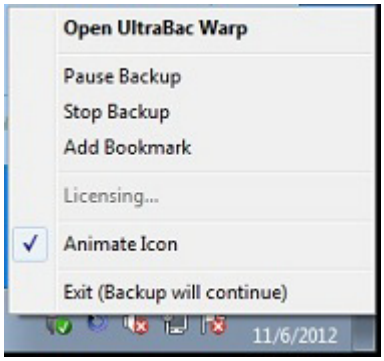


Fig. 3-35: Tray icon.

Restore

Restoring is the process of retrieving data in the event of a data loss due to natural disasters, unintentional deletion, hardware failures, etc. Since you backed up the data, UltraBac Warp can restore the computer or selected data from a desired restore point and avoid loss of valuable information. Under Restore you can perform a restore of an entire partition or just selected files and folders.

Restore Whole Partition

This component helps you to restore the entire disk's contents that have been backed up so far. In case of data loss due to any reason, the data which has been protected at another location can be restored, without any loss.

Before you choose Restore Whole Partition, some pre-conditions need to be met. A restore cannot be performed if a Full Backup is not available. For an old backup set, the backup files must exist to be able to perform a restore of a whole partition. For a current backup set, UltraBac Warp can perform a restore while CIP is in progress.

Before you begin the restore process make sure you have available disks and/or partitions to restore to. If you need to perform a whole partition restore of either the Operating System (OS) or System Reserved (Boot) partitions, this will need to be done using the Bare Metal Recovery disk (addressed later in the manual). Individual file and folder restores from the Operating System partition can still be done through the standard restore process (addressed later in the manual). The following examples are of a non-OS whole partition restore.

To begin a full restore you will need to perform the following steps:

Step 1: On the main screen, click "Whole Partition".

Fig. 4-1: Main screen.

Step 2: Choose an available backup destination using "Browse...", as seen in figure 4-2.

Step 3: Choose the date on the calendar you would like to restore the Full Backup data from, as seen in figure 4-2. The partitions available for restore will be shown in the window.

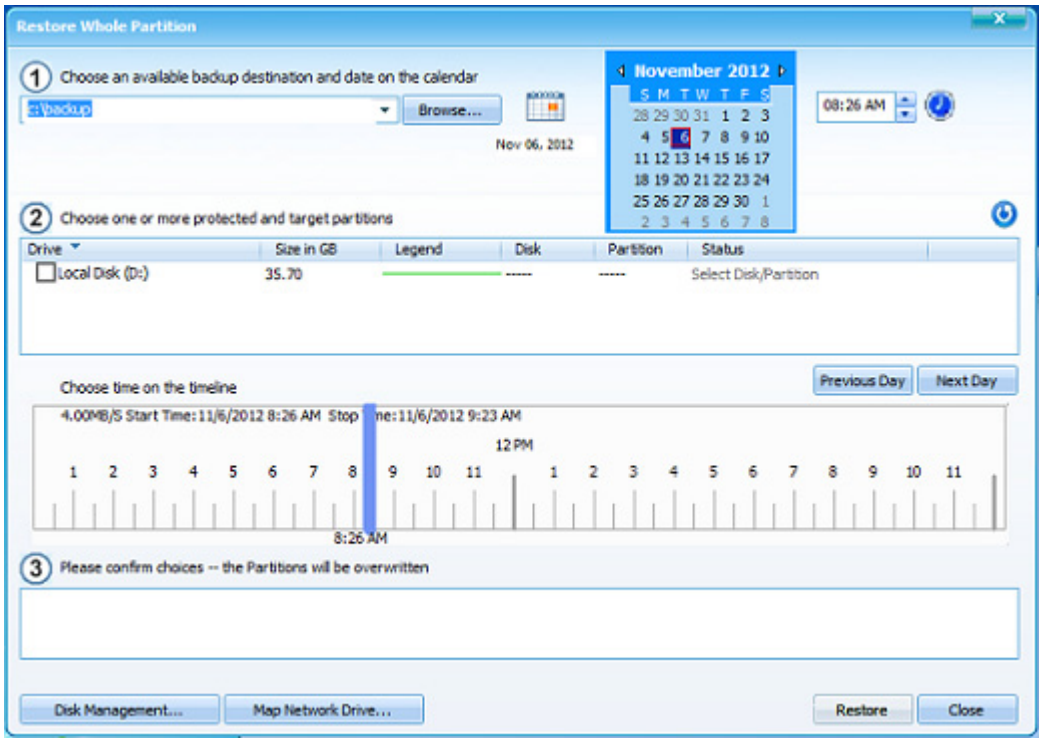


Fig. 4-2: Choosing a backup destination and calendar date.

You will use Disk Management to remove the drive letter from each partition that you wish to restore before doing the restore. This prevents the accidental restore over an in-use partition.

Step 4: Click the "Disk Management..." button.

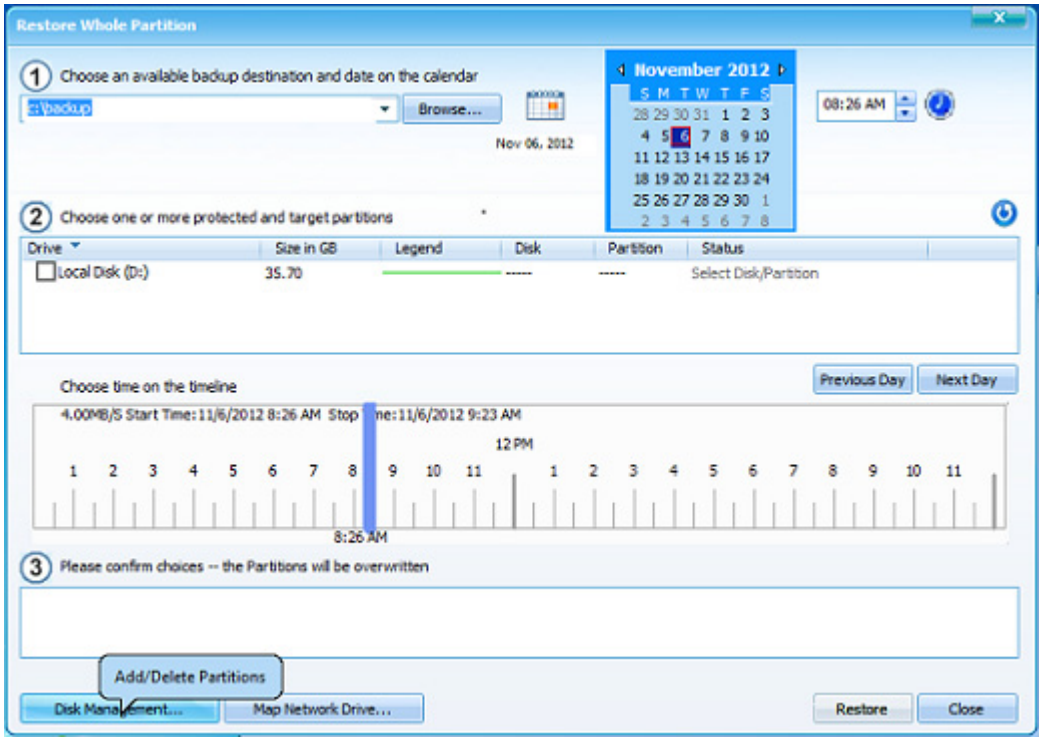


Fig. 4-3: Disk Management.

Step 5: Right click on the partition you wish to restore and choose "Change Drive Letter and Paths...".

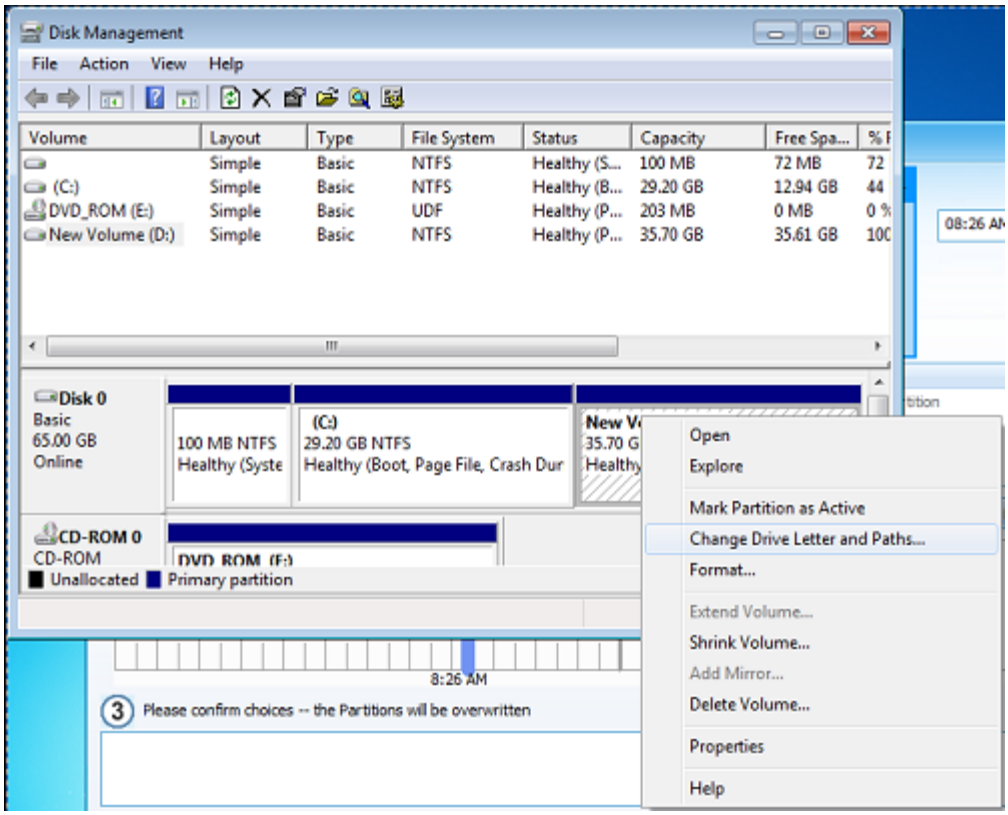


Fig.4-4: Change Drive Letter and Paths.

Step 6: Click "Remove" and hit "OK".

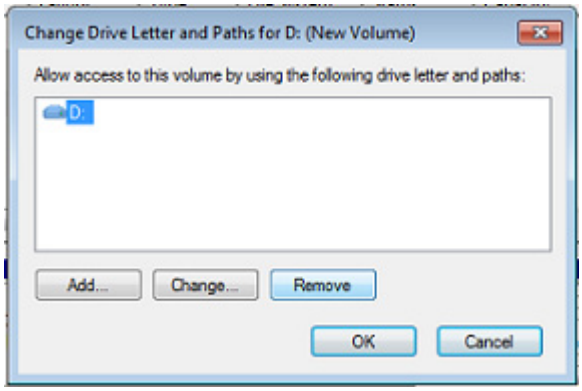


Fig. 4-5: Remove drive letter.

Step 7: Use the "Refresh" button to see the updated partition list.

Please Note: In the 64-bit version, the "Refresh" icon appears as a "Refresh" button.

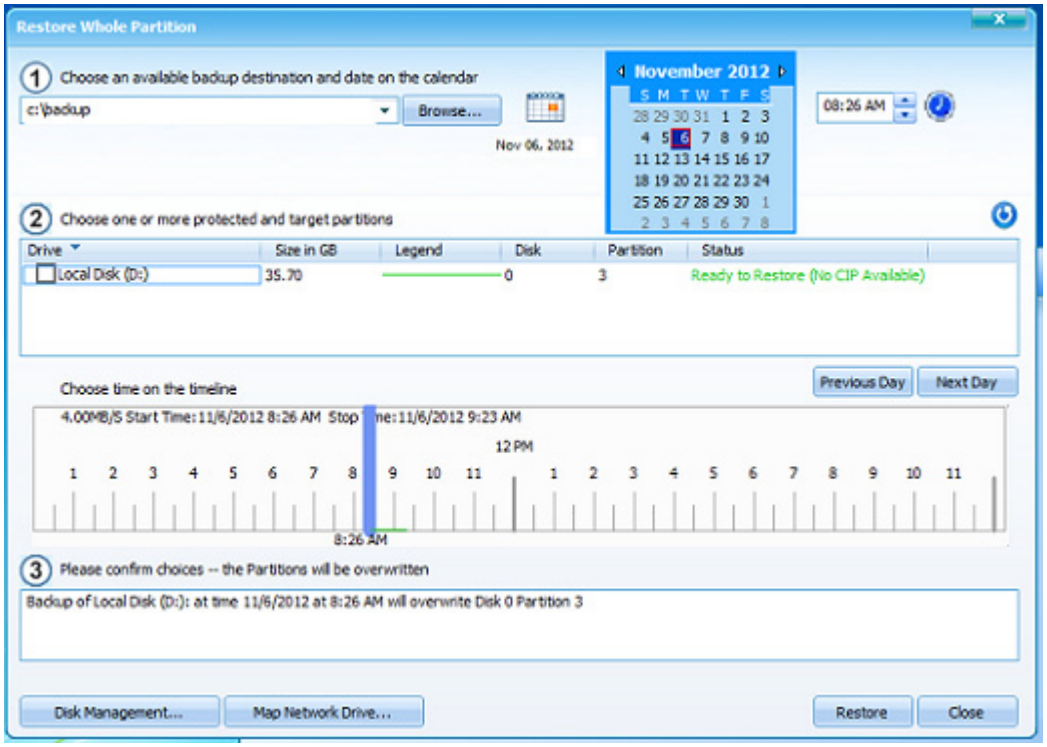


Fig. 4-6: Refreshed Restore Whole Partition screen.

Step 8: Choose one or more protected and target partitions for restore.

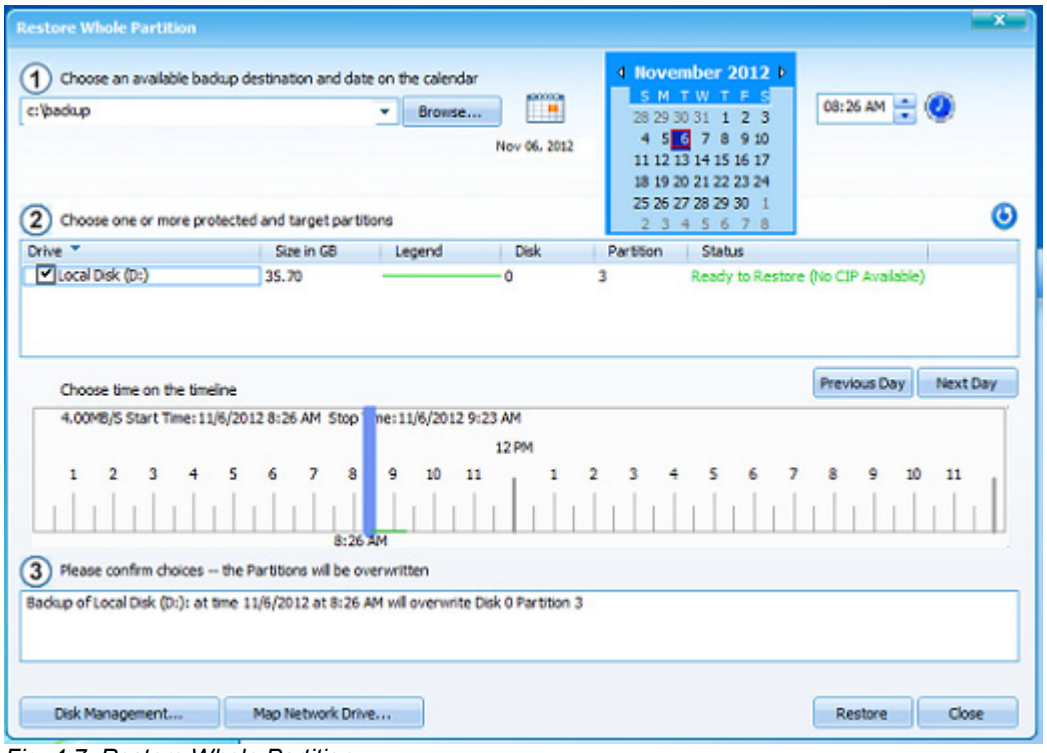


Fig. 4-7: Restore Whole Partition.

There are two optional buttons for configuring your restore destination:

- You can use the "Disk Management" button to manage the disks and their partitions you wish to restore to. This button opens up the Disk Management functionality of the Windows computer on which UltraBac Warp is run.

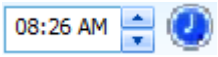
  Please Note: If you create or delete any partition using the Disk Management functionality, use the "Refresh" button to see the updated partition list.

- You can use the "Map Network Drive" button to map to a shared drive on a network if the backup file destination you wish to restore from is on a remote drive.

  Please Note: If you are restoring your data from a UNC Path you will be asked for a user name and password of the computer where the backups are located. The user name and password will be the same as the ones provided at the time of the backup set creation (where backup destination is on a UNC Path). Enter the user name and password then click "OK".

Fig. 4-8: Credentials for accessing backup set on a UNC Path.

Please Note: More information about these two buttons can be found in the Bare Metal Recovery section.

Step 9: On the timeline, choose either a bookmark or a timestamp to restore from. If you don't select a point, the default time is automatically chosen as the restore point. You can also use the Edit Time Control 

to adjust the time.

Please note: In the 64 bit version, the "edit time" icon appears as a "Set Time" button.

Step 10: Check the selections you made as they appear in the confirmation area provided.

Step 11: Click on "Restore" to start the restore process.

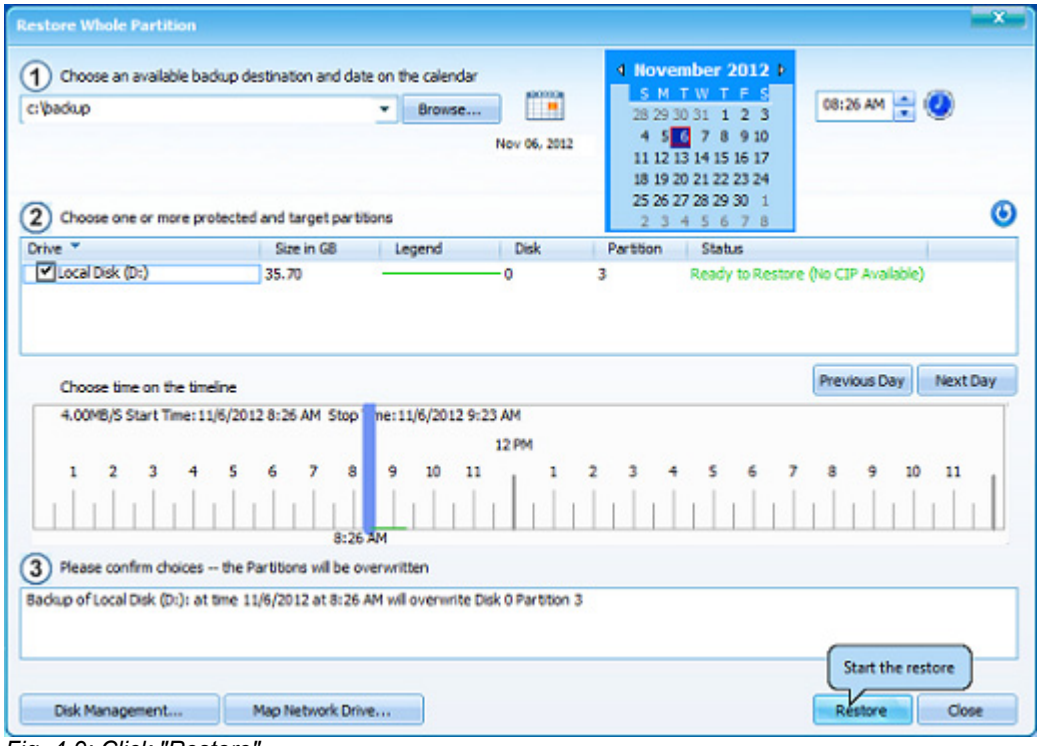


Fig. 4-9: Click "Restore".

If you used an encryption key during the backup process, the *Encryption* dialogue box is displayed. There are two options available:

- Type the encryption key and click "OK".

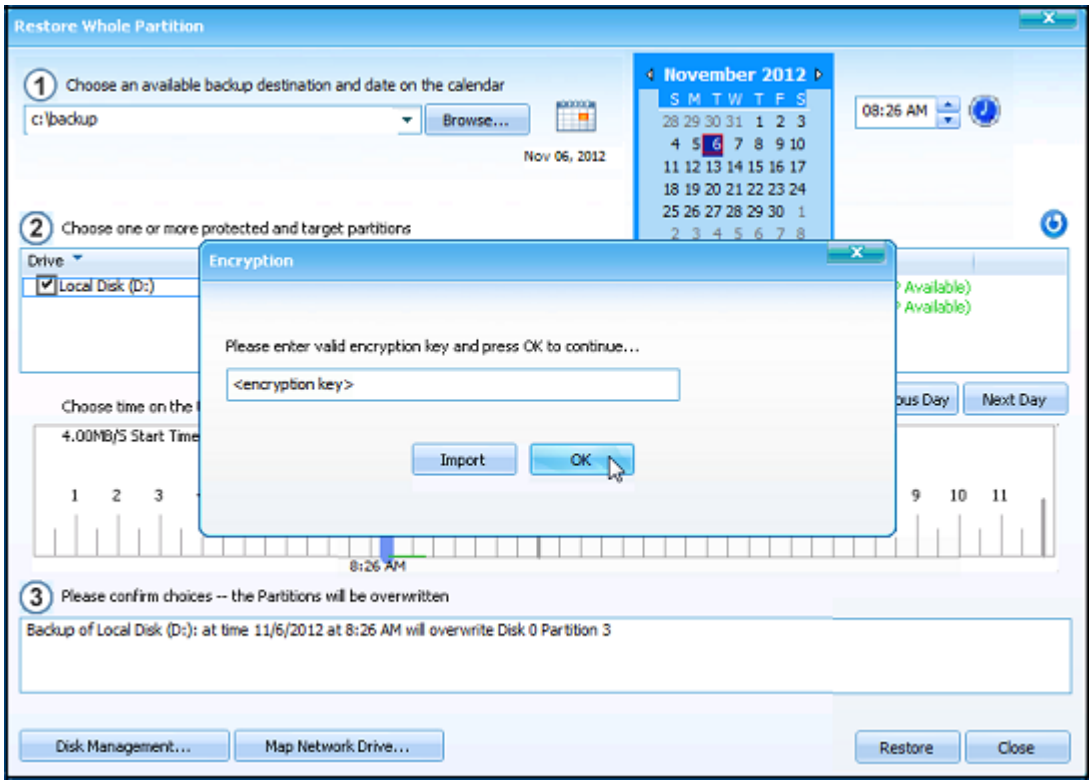


Fig. 4-10: Encryption key.

- Click "Import" to import the encryption key if you exported it during the creation of the backup set. After clicking "Import", browse to the folder where you have exported the key. Click "Open", then click "Import".

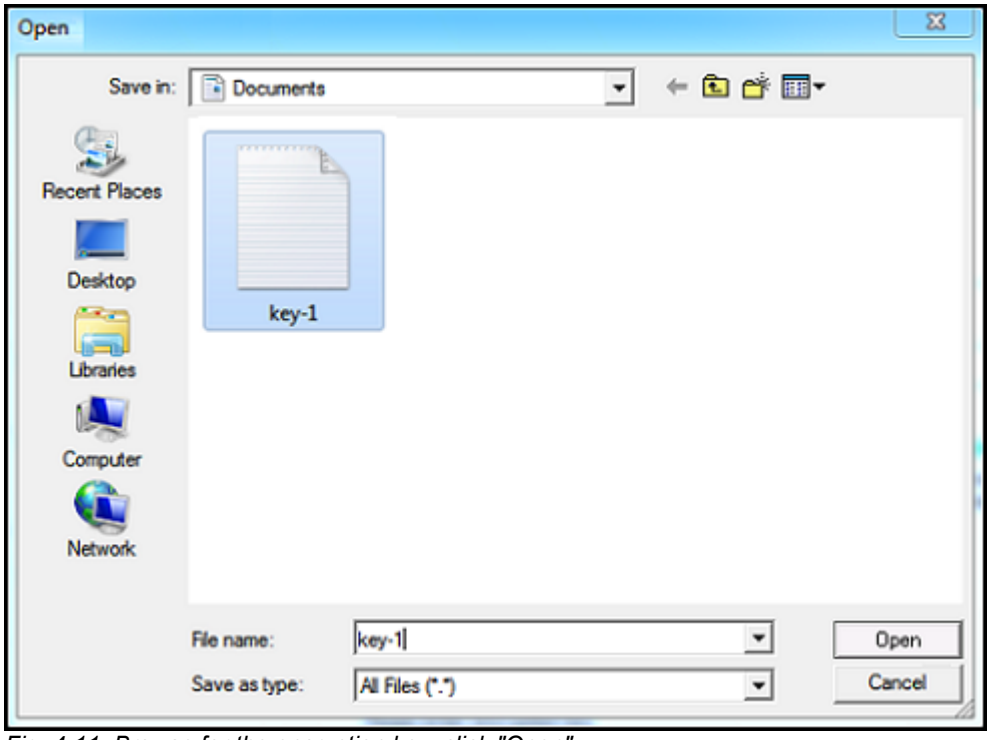


Fig. 4-11: Browse for the encryption key, click "Open".

A success message is displayed saying "Imported key successfully" as seen in figure 4-12. Click "OK".

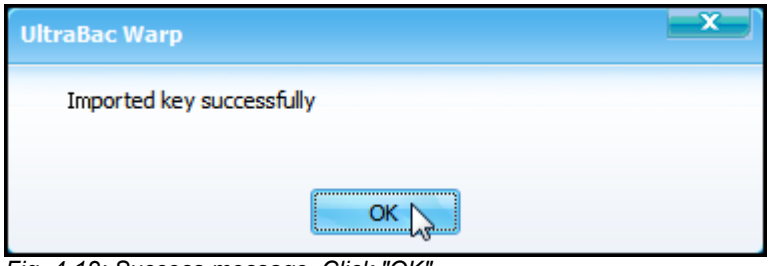


Fig. 4-12: Success message, Click "OK".

Step 12: You will then see a progress bar depicting the restore process. During the restore process, you can cancel it at any time by clicking "Cancel".

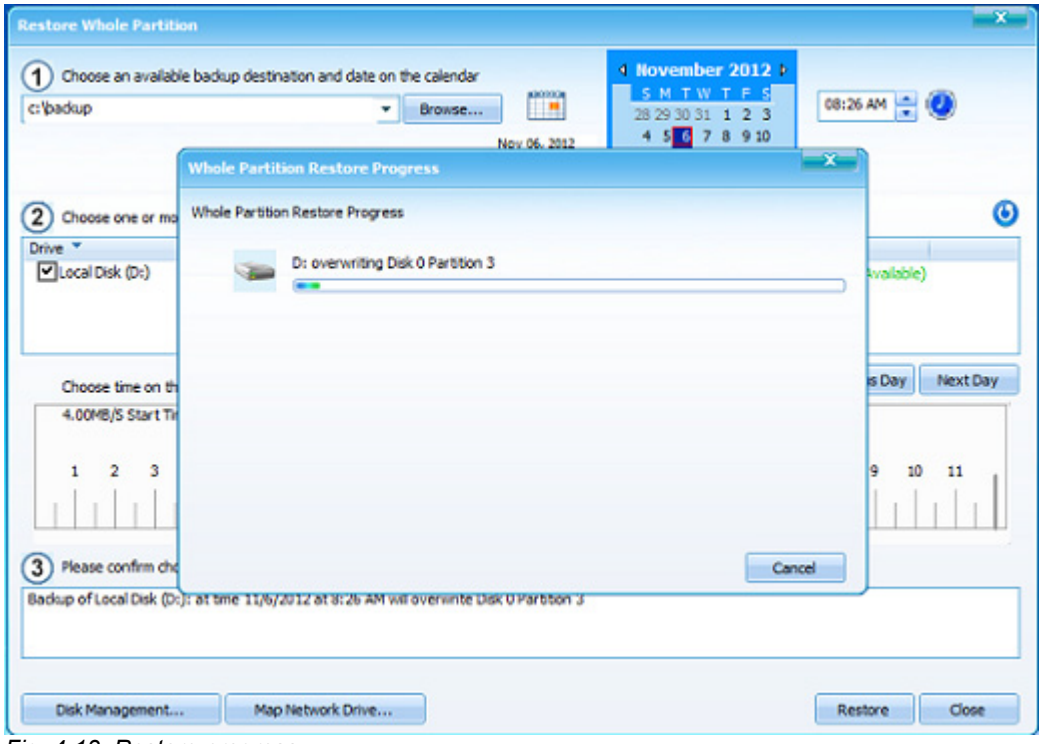


Fig. 4-13: Restore progress.

Step 13: A success message will be displayed saying "Restore completed successfully". Click "OK".

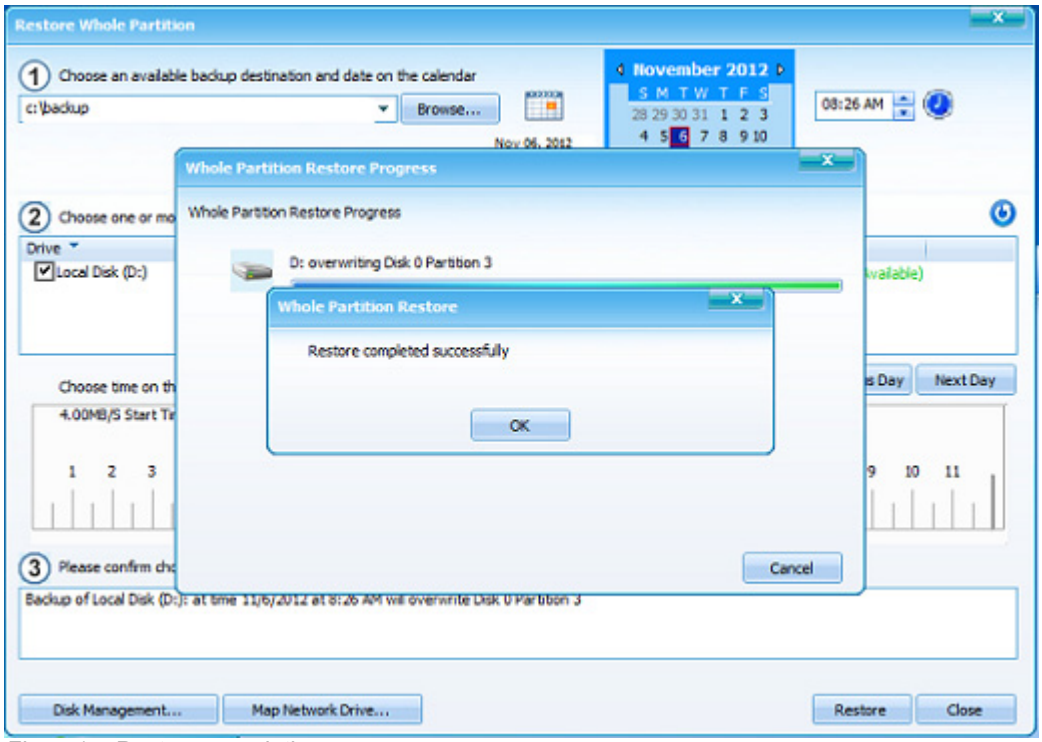


Fig. 4-14: Restore completion.

Restore Operation Using Bookmarks

The thick vertical line represents the moveable timeline bar and the thin vertical line represents the added bookmark(s) as seen in the figure 4-15.

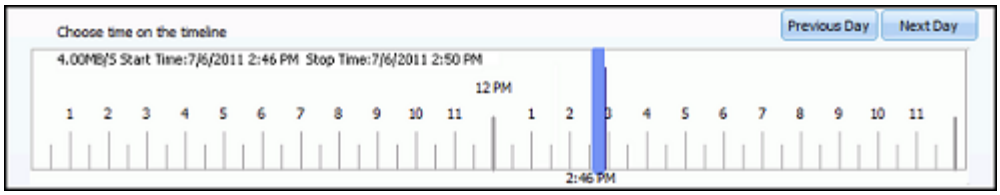

Choose time on the timeline
Previous Day
Next Day
4.00MB/5 Start Time:7/6/2011 2:46 PM Stop Time:7/6/2011 2:50 PM
12 PM
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11
2:46 PM

Fig. 4-15: Bookmark on the timeline.

Move the timeline bar onto the bookmark, then click on the bookmark (thin vertical line) to restore using a bookmark as seen in figure 4-16.

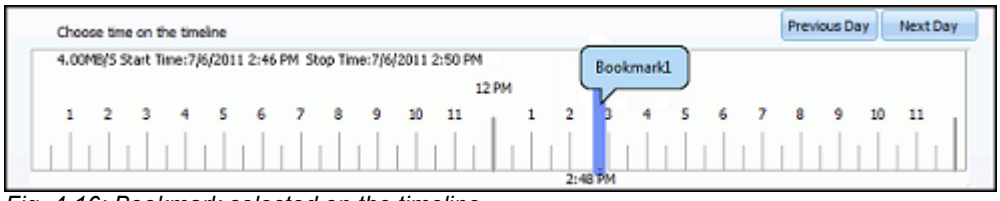

Choose time on the timeline
Previous Day
Next Day
4.00MB/5 Start Time:7/6/2011 2:46 PM Stop Time:7/6/2011 2:50 PM
Bookmark1
12 PM
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11
2:48 PM

Fig. 4-16: Bookmark selected on the timeline.

Click "Restore". A success message will be displayed saying "Restore completed successfully". Click "OK".

Mount/Unmount

Mount/Unmount allows you to restore selective files and folders as desired instead of the entire partitions.

Steps to Mounting Partitions

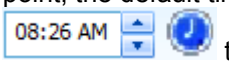
Step 1: Click the "Mount" button on the main screen to restore files and folders.

Step 2: Choose an available backup destination using the "Browse..." button.

Step 3: Select the date on the calendar from which you need to mount the partition.

Step 4: Select one or more protected partitions you want to restore.

Step 5: Select the mount points for those partitions next to their names under "Mount As".

Step 6: On the timeline, choose either a bookmark or a timestamp to mount from. If you don't select a point, the default time is automatically chosen as the mount point. You can also use the Edit Time Control 

to adjust the time.

Step 7: Click "Mount" to mount the partitions chosen in **Step 4** above, as seen in figure 4-17.

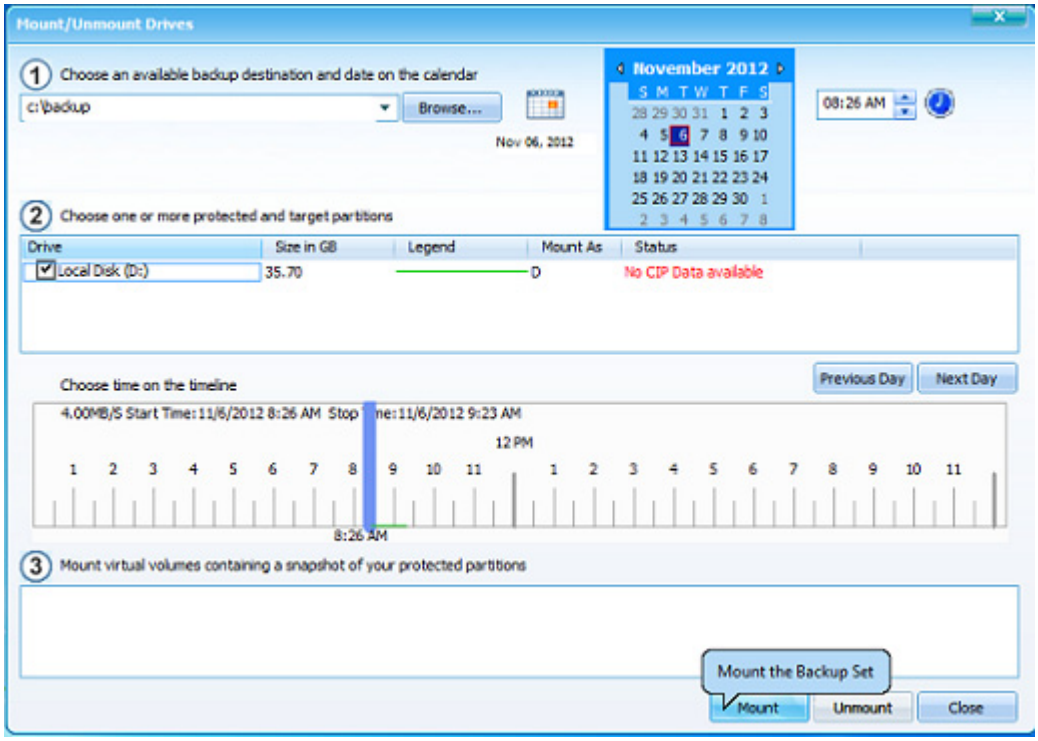


Fig. 4-17: Click "Mount".

If you used an encryption key during the backup process, the *Encryption* dialogue box is displayed. There are two options available:

- Type the encryption key and click "OK".
- Click "Import" to import the encryption key if you exported it during the creation of the backup set. After clicking "Import", browse to the folder where you have exported the key. Click "Open", then click "Import".

  A Success message will be displayed saying "Imported key successfully". Click "OK".

If you are mounting your data from a UNC Path you will be asked for a user name and password of the computer where the backups are located. The user name and password will be the same as the ones provided at the time of the backup set creation (where backup destination is on a UNC Path). Enter the user name and password then click "OK".

Fig. 4-18: Credentials for accessing backup set on a UNC Path.

After mounting a partition, you will see the mounted partition in the box under "Mount virtual volumes containing a snapshot of your protected partitions" as seen in figure 4-19.

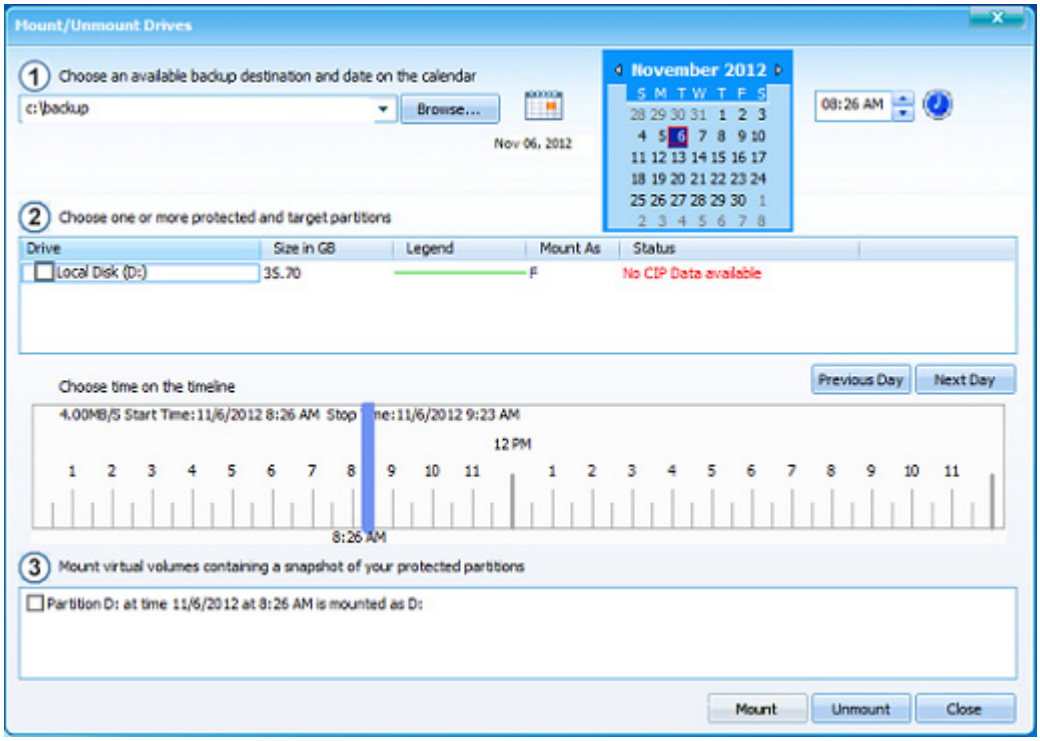


Fig. 4-19: Mounted partitions.

Step 8: Close the window.

The partition is now mounted to your computer and can be accessed through Windows Explorer, Command Prompt, or any other application on the system as you would any hard drive in the system. You can then manually go to the drives where the selected partitions have been mounted and restore the desired data. Select and copy your desired files and folders to your desired location.

Mount Operation Using Bookmarks

The thick vertical line represents the moveable timeline bar and the thin vertical line represents the added bookmark(s) as seen in figure 4-20.

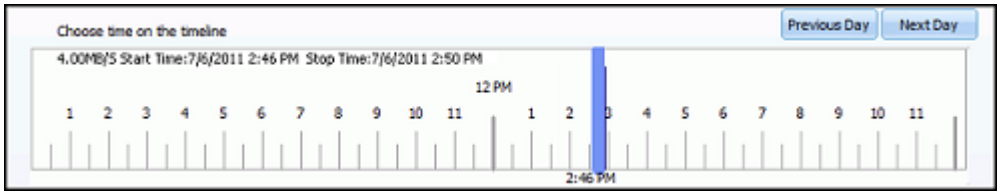

Choose time on the timeline
Previous Day
Next Day
4.00MB/5 Start Time:7/6/2011 2:46 PM Stop Time:7/6/2011 2:50 PM
12 PM
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11
2:46 PM

Fig. 4-20: Bookmark on the timeline.

Move the timeline bar onto the bookmark, then click on the bookmark (thin vertical line) to mount using a bookmark as seen in figure 4-21.

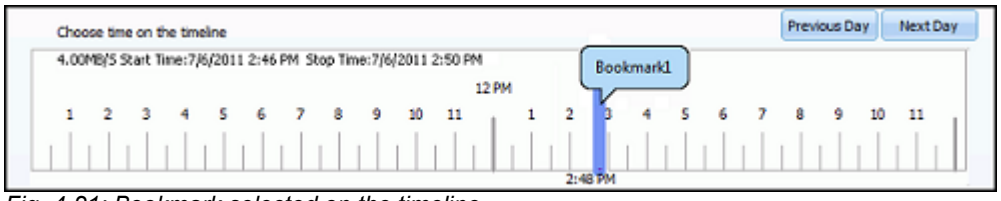

Choose time on the timeline
Previous Day
Next Day
4.00MB/5 Start Time:7/6/2011 2:46 PM Stop Time:7/6/2011 2:50 PM
Bookmark1
12 PM
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11
2:48 PM

Fig. 4-21: Bookmark selected on the timeline.

Click "Mount".

Steps to Unmounting Partitions

Step 1: In the box under "Mount virtual volumes containing a snapshot of your protected partitions", select the desired partitions and click "Unmount".

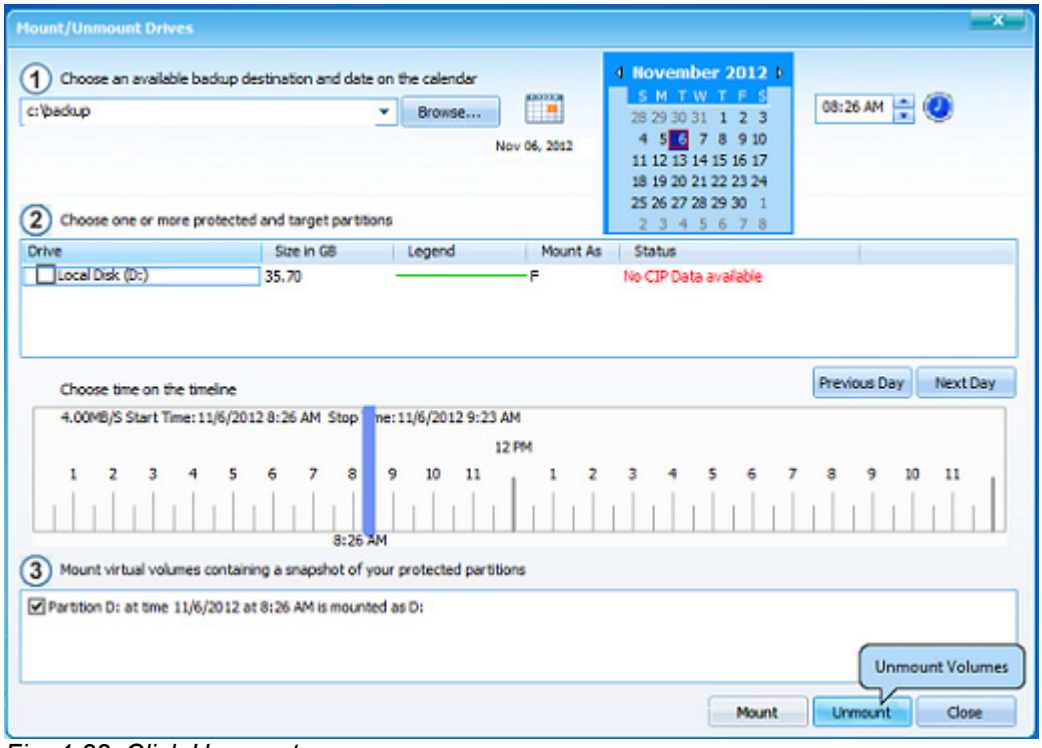


Fig. 4-22: Click Unmount.

Step 2: Click "Close".

Please Note: You can also unmount the mounted partition(s) using Windows Explorer by right clicking on the mounted partition and clicking "Unmount" as seen in figure 4-23.

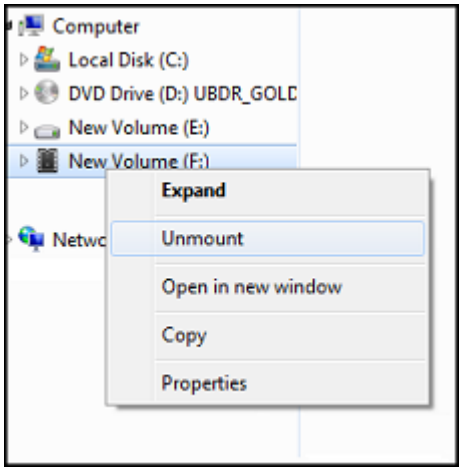


Fig. 23: Unmount using Windows Explorer.

If you exit the application before unmounting the mounted partition(s); UltraBac Warp will ask you whether you want to unmount them. If you click "Yes" it will delete all the mounted drives and partitions.

UltraBac Media Builder

UltraBac Media Builder is a disk creation utility for UltraBac Warp Bare Metal Recovery (BMR). UltraBac Media Builder is automatically installed when UltraBac Warp is installed with UltraBac Warp. This section provides instructions on how to use UltraBac Media Builder.

UltraBac Media Builder requires that Windows Automated Installation Kit (AIK) for Windows 7 be installed. If Windows AIK is not installed on your computer, UltraBac Media Builder will detect that it is not installed and will prompt you to install it by providing a link for its download location.

Please Note: You must have a permanent license in order to use UltraBac Media Builder. An UltraBac Warp license check is performed, and if an evaluation or extension license is detected the UltraBac Media Builder will not run.

Please Note: UltraBac Media Builder cannot be used on Windows XP. A Bare Metal Recovery disk created on another Windows 7 system can be used to perform a Bare Metal Recovery on a Windows XP system.

Step 1: To open Media Builder, click "Start", "All Programs", "UltraBac Warp", "UltraBac Media Builder" as seen in figure 5-1.

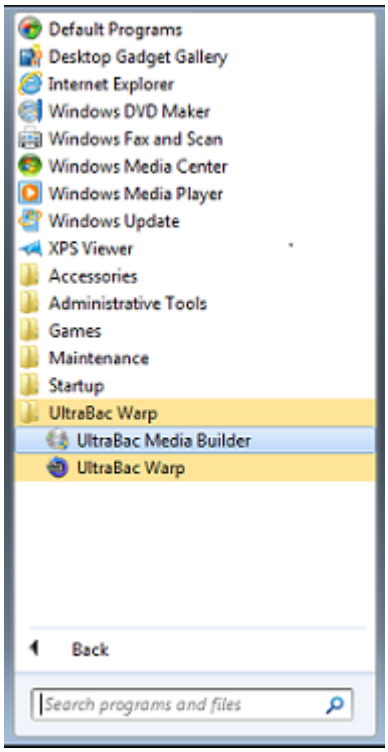


Fig. 5-1: Click UltraBac Media Builder.

If Windows Automated Installation Kit (AIK) for Windows 7 is already installed, skip the remainder of Step 1 and go directly to Step 2. If you do not already have Windows AIK for Windows 7 installed, you will receive a screen saying "Windows AIK for Windows 7 is not installed".

Please note: The Windows AIK must be installed using an account with Administrator permissions.

The link highlighted in figure 5-2 takes you to the Microsoft download page of Windows AIK for Windows 7. Click on the link to start the download of the Windows AIK ISO file.

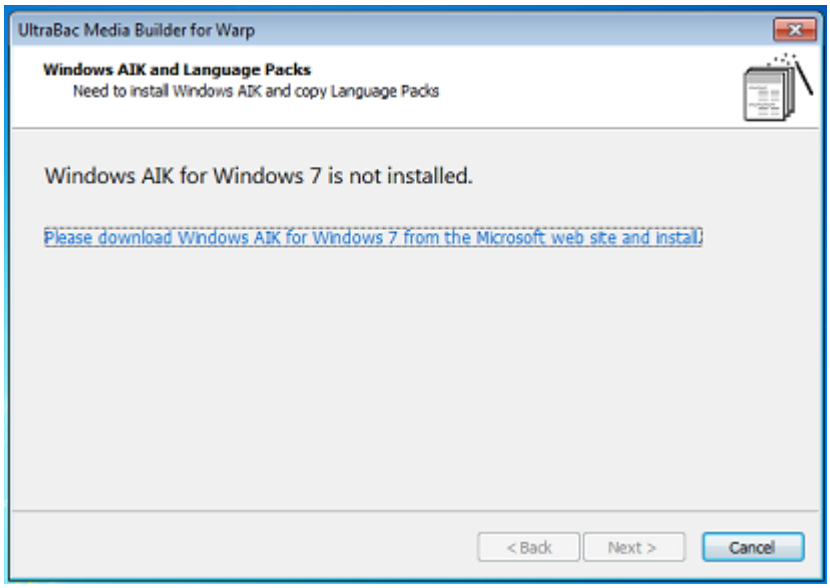

UltraBac Media Builder for Warp
Windows AIK and Language Packs
Need to install Windows AIK and copy Language Packs
Windows AIK for Windows 7 is not installed.
Please download Windows AIK for Windows 7 from the Microsoft web site and install
< Back
Next >
Cancel

Fig. 5-2: Click on the link to download Windows AIK.

Once the ISO has been downloaded, you will need to burn the ISO file to a DVD.

Please Note: In Windows Vista and later, you can right click on the ISO file and choose the option "Burn to disc" if you have a DVD burner installed.

Use the Windows AIK DVD to install Windows AIK onto your computer. Once Windows AIK is installed, you will need to cancel and restart UltraBac Media Builder.

Step 2: After installing Windows AIK you will need to copy the language packs for Windows AIK. You will be prompted with a link in the next screen that appears. Click on the "Copy Language Packs for Windows AIK to your system" link.

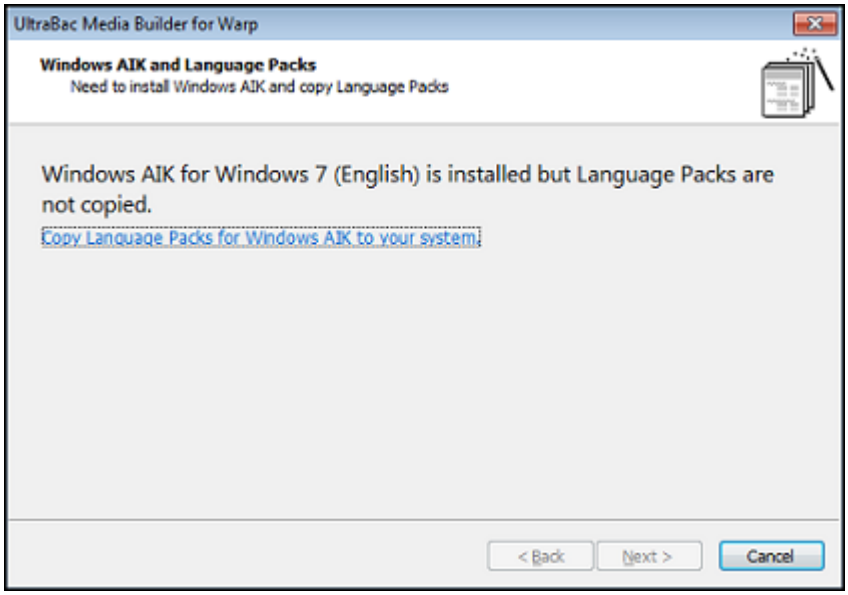

UltraBac Media Builder for Warp
Windows AIK and Language Packs
Need to install Windows AIK and copy Language Packs
Windows AIK for Windows 7 (English) is installed but Language Packs are not copied.
Copy Language Packs for Windows AIK to your system.
< Back
Next >
Cancel

Fig. 5-3: Copy language packs.

The *Copy Language Packs* dialogue box is then displayed which allows you to copy the language packs to your system. Select the correct DVD-ROM drive and click "Copy" as seen in figure 5-4.

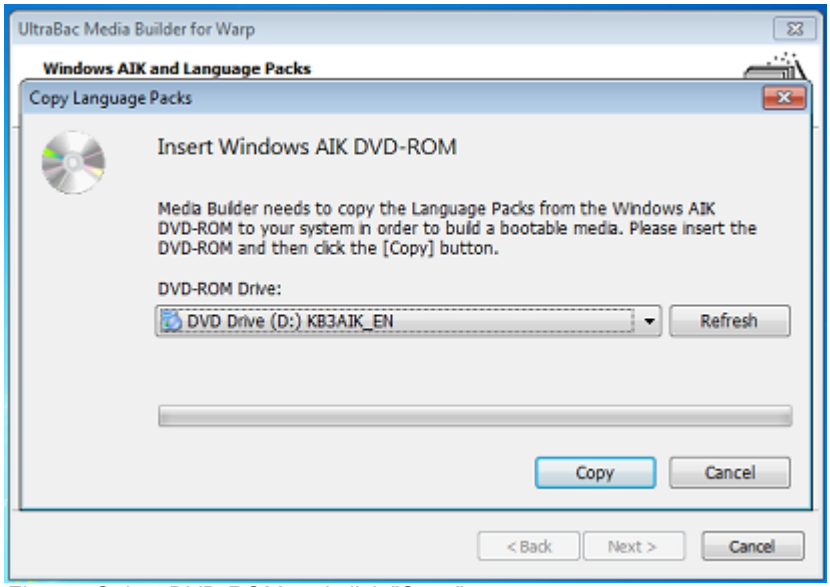

UltraBac Media Builder for Warp
Windows AIK and Language Packs
Copy Language Packs
Insert Windows AIK DVD-ROM
Media Builder needs to copy the Language Packs from the Windows AIK DVD-ROM to your system in order to build a bootable media. Please insert the DVD-ROM and then click the [Copy] button.
DVD-ROM Drive:
DVD Drive (D:) KB3AIK_EN
Refresh
Copy
Cancel
< Back
Next >
Cancel

Fig 5-4: Select DVD-ROM and click "Copy".

A status bar will show you the progress of copying the language packs.

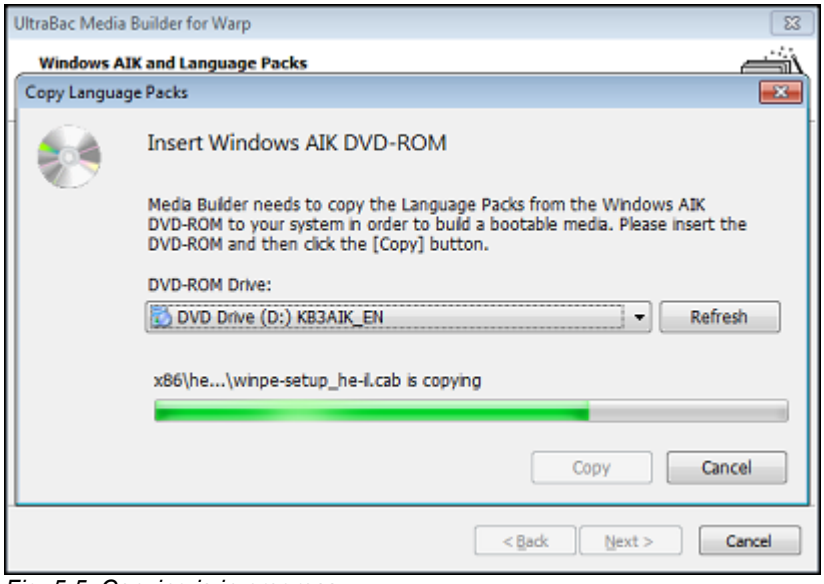

UltraBac Media Builder for Warp
Windows AIK and Language Packs
Copy Language Packs
Insert Windows AIK DVD-ROM
Media Builder needs to copy the Language Packs from the Windows AIK DVD-ROM to your system in order to build a bootable media. Please insert the DVD-ROM and then click the [Copy] button.
DVD-ROM Drive:
DVD Drive (D:) KB3AIK_EN
Refresh
x86\he...\winpe-setup_he-il.cab is copying
Copy
Cancel
< Back
Next >
Cancel

Fig. 5-5: Copying is in progress.

A success message is displayed saying "Language Packs for Windows AIK have been copied". Click "OK".

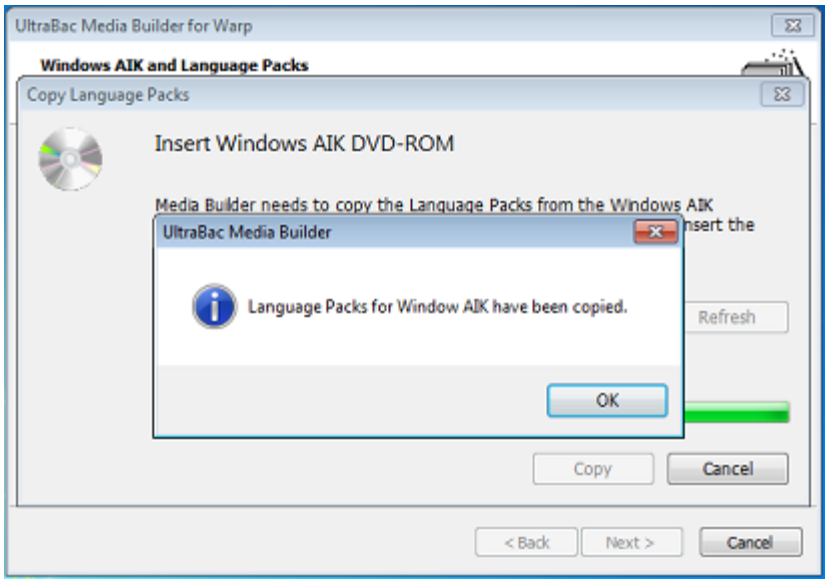


Fig. 5-6: Success message

Step 3: After installing Windows AIK and its respective language packs, the "Next" button will be enabled. Click "Next" to proceed further, as seen in figure 5-7.

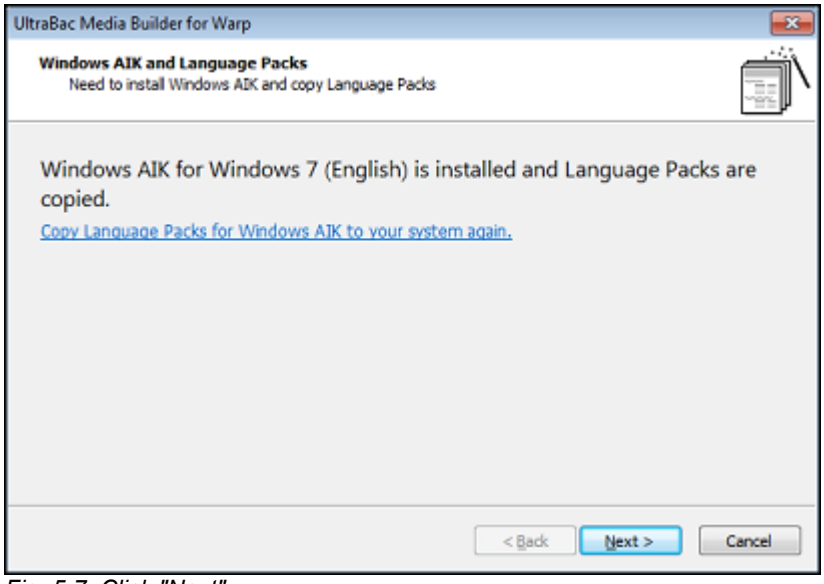

UltraBac Media Builder for Warp
Windows AIK and Language Packs
Need to install Windows AIK and copy Language Packs
Windows AIK for Windows 7 (English) is installed and Language Packs are copied.
Copy Language Packs for Windows AIK to your system again.
< Back
Next >
Cancel

Fig. 5-7: Click "Next".

Step 4: Select the appropriate CPU Architecture, Language, and Time Zone then click "Next".

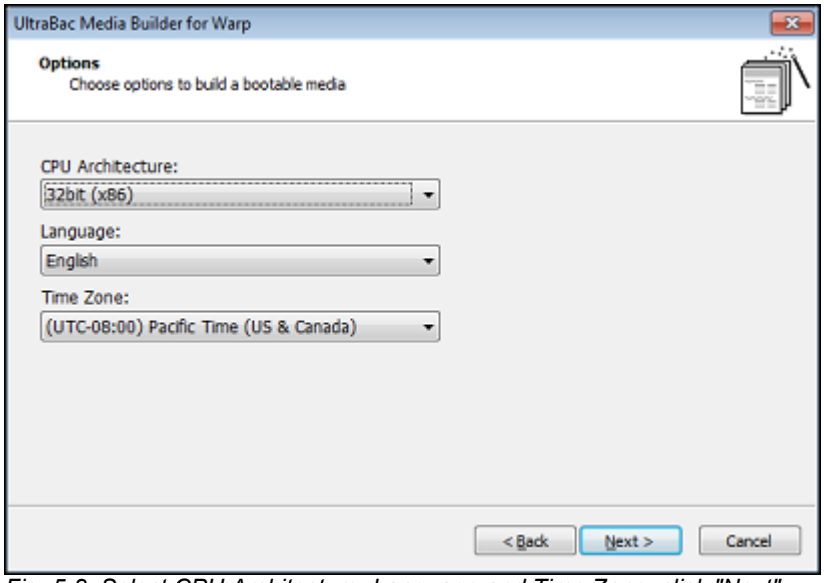


Fig. 5-8: Select CPU Architecture, Language and Time Zone; click "Next".

Step 5: Select either Image File or USB flash disk as your destination, then click "Next" as seen in figure 5-9.

Please Note: When choosing the option for USB flash disk, the USB flash disk must be blank and formatted with FAT32 or NTFS file system.

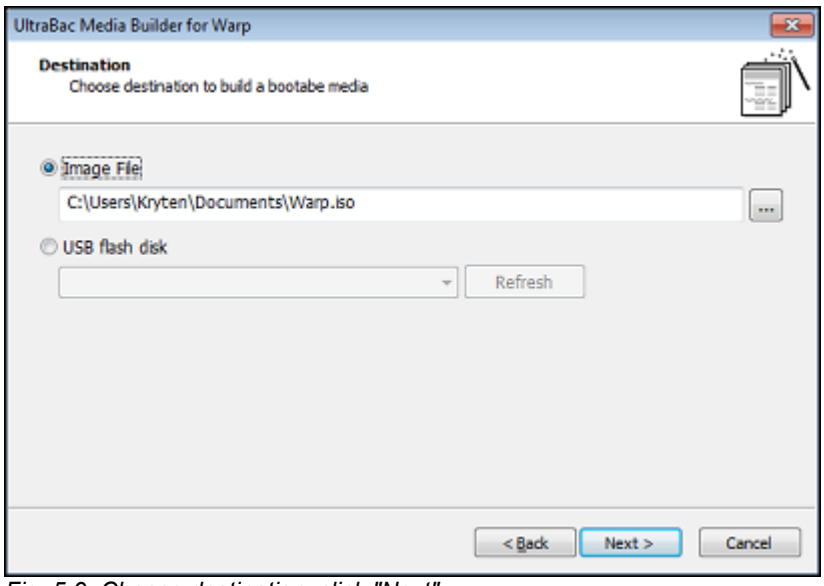


Fig. 5-9: Choose destination. click "Next".

Step 6: After clicking "Next", the UltraBac Media Builder starts building an ISO image for UltraBac Warp BMR to the chosen destination. You will see the progress of mounting the image, as seen in figure 5-10.

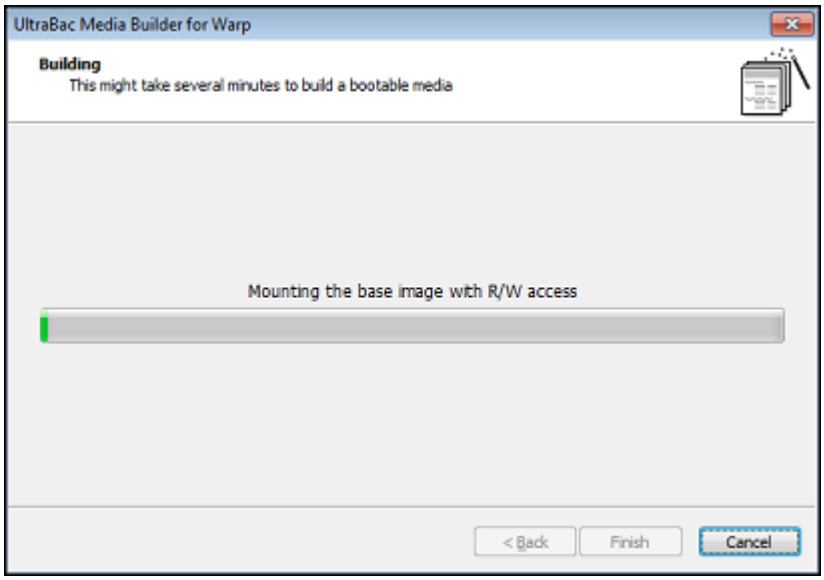


Fig. 5-10: Building UltraBac Warp BMR.

Step 7: When the UltraBac Warp BMR ISO is generated, a confirmation dialogue box displays asking "Do you want to launch Disc Image Burner?". Click "Yes" to launch the Disk Image Burner or "No" to close the UltraBac Media Builder.

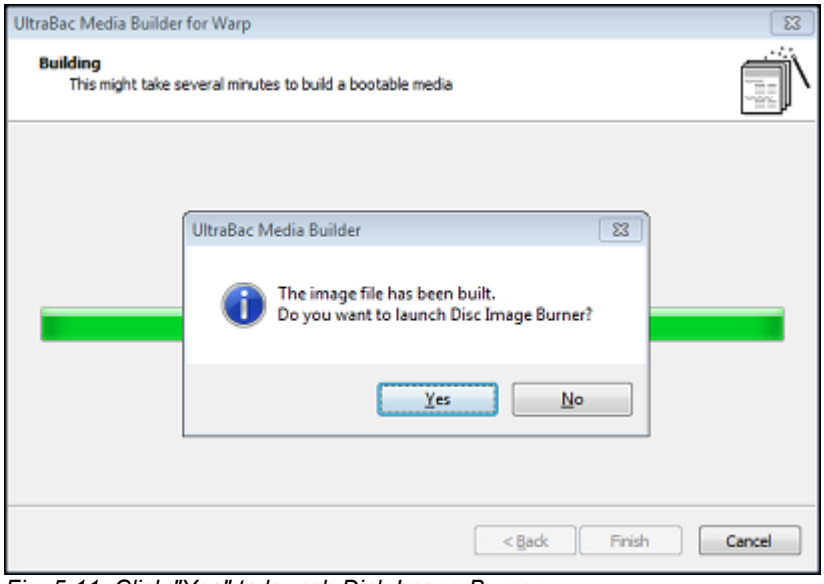


Fig. 5-11: Click "Yes" to launch Disk Image Burner.

If you click "Yes", the Windows Disk Image Burner is launched and UltraBac Media Builder will close. Click "Burn" to burn the generated ISO image.

Please Note: In Windows Vista and later, you can right click on the ISO file and choose the option "Burn to disc".

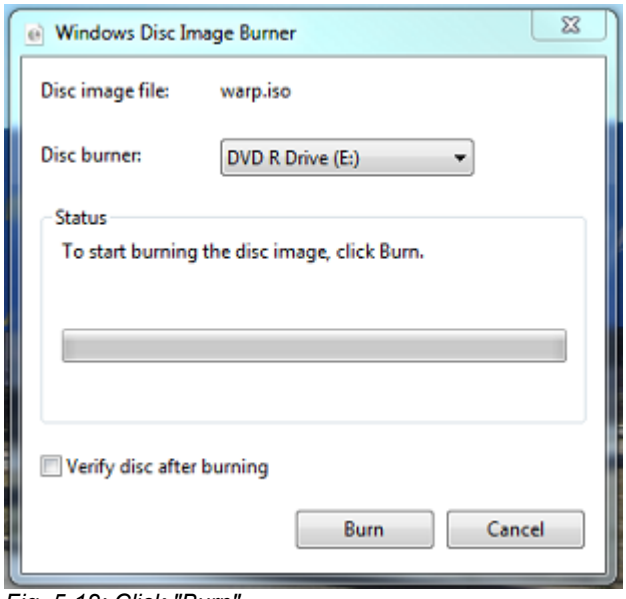


Fig. 5-12: Click "Burn".

Bare Metal Recovery

Bare Metal Recovery (BMR) is the process of restoring a computer to the point in time of a backup after a drive failure, system crash, or other catastrophic event. It reverts the image of the original drive into the new drive and restarts the system. UltraBac Warp restores a computer system from 'Bare Metal', that is, without any previously installed software. There is also no need to account for any hardware differences as it recovers to dissimilar hardware.

As part of the software installation package, UltraBac Warp includes a utility that can be used to make an ISO image. The user can use this to boot and recover the computer during the BMR process. This ISO can be used to recover any computer.

Follow the step-by-step instructions to perform a BMR on the affected computer. You will need to have access to the backup of your OS partition along with a System Reserved Partition if the computer has the 100MB partition (Vista, Windows Server 2008, and later).

Bare Metal Recovery (BMR) has three restore scenarios:

Scenario 1: BMR to original disk and hardware.

Scenario 2: BMR to a new hard disk but otherwise original hardware.

Scenario 3: BMR to dissimilar hardware.

The first 10 steps are consistent for all three BMR scenarios.

Step 1: Boot the computer with the latest bootable ISO image that you created with UltraBac Media Builder.

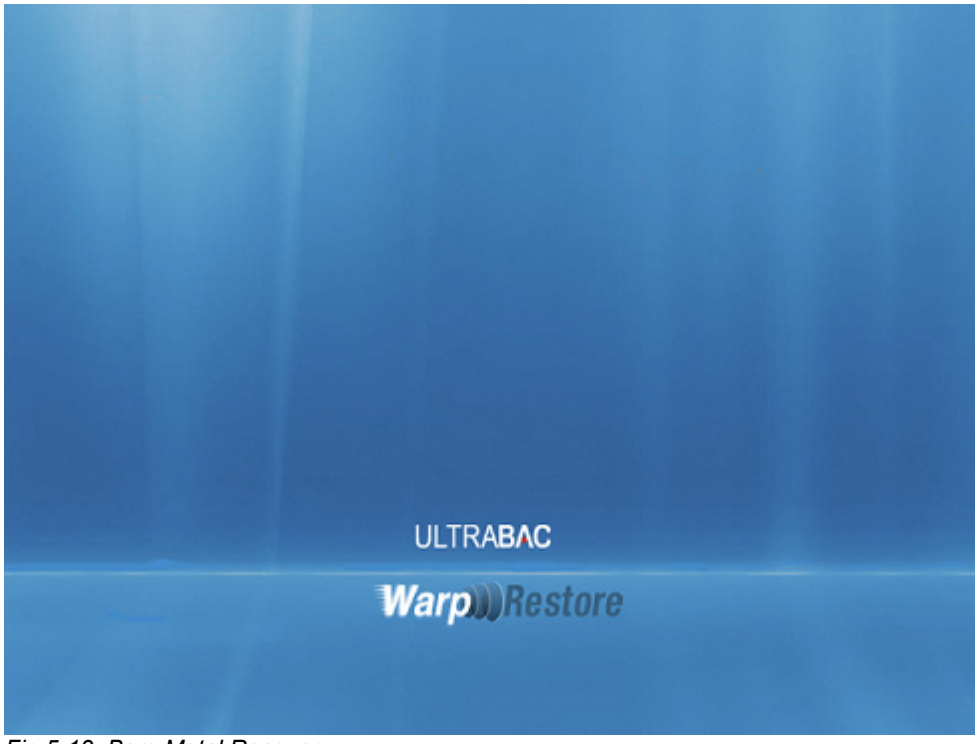


Fig.5-13: Bare Metal Recovery.

Step 2: Read the License Agreement and **accept** the terms and conditions, then click "OK".

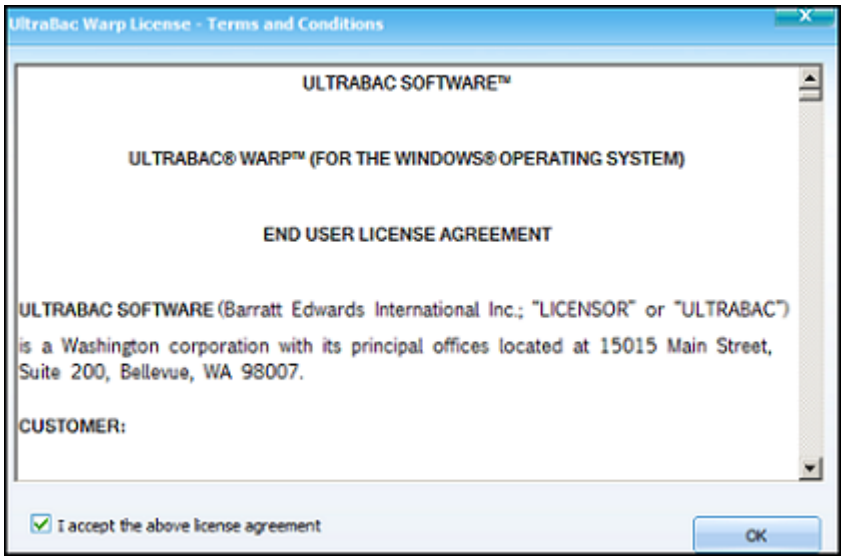

UltraBac Warp License - Terms and Conditions
ULTRABAC SOFTWARE™
ULTRABAC® WARP™ (FOR THE WINDOWS® OPERATING SYSTEM)
END USER LICENSE AGREEMENT
ULTRABAC SOFTWARE (Barratt Edwards International Inc.; "LICENSOR" or "ULTRABAC") is a Washington corporation with its principal offices located at 15015 Main Street, Suite 200, Bellevue, WA 98007.
CUSTOMER:
I accept the above license agreement
OK

Fig. 5-14: License Agreement

Step 3: Set the network configuration, either manually or by enabling Dynamic Host Configuration Protocol (DHCP). To use DHCP, check the box "Enable DHCP". If you are restoring from a UNC path, you will need to provide the UNC path computer name, the user name and password, and the domain or workgroup that the computer is in, as seen in figure 5-15.

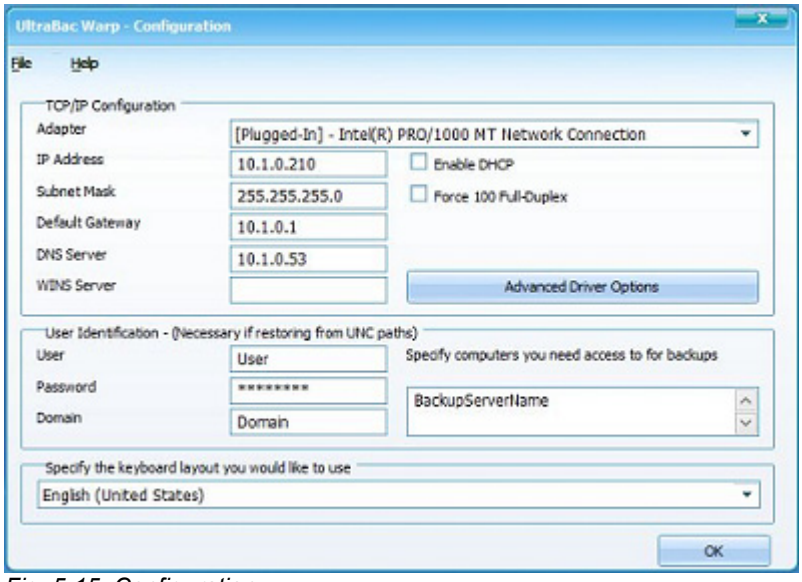


Fig. 5-15: Configuration.

Once the configuration is complete, the UltraBac Warp main screen is displayed with all its features disabled except "Whole Partition". This is the only option available booting to the BMR ISO.

Fig. 5-16: Main screen with only "Whole Partition" active.

A Command Prompt window can be opened for advanced users that wish to manually configure or verify information from that environment. Right click anywhere on the main screen. This pops up a small text box saying "Launch Command Prompt" as seen in figure 5-17. Click "Launch Command Prompt" and a Command Prompt window will open. This enables you to manually create partitions using "diskpart", see the computer's IP address, etc.

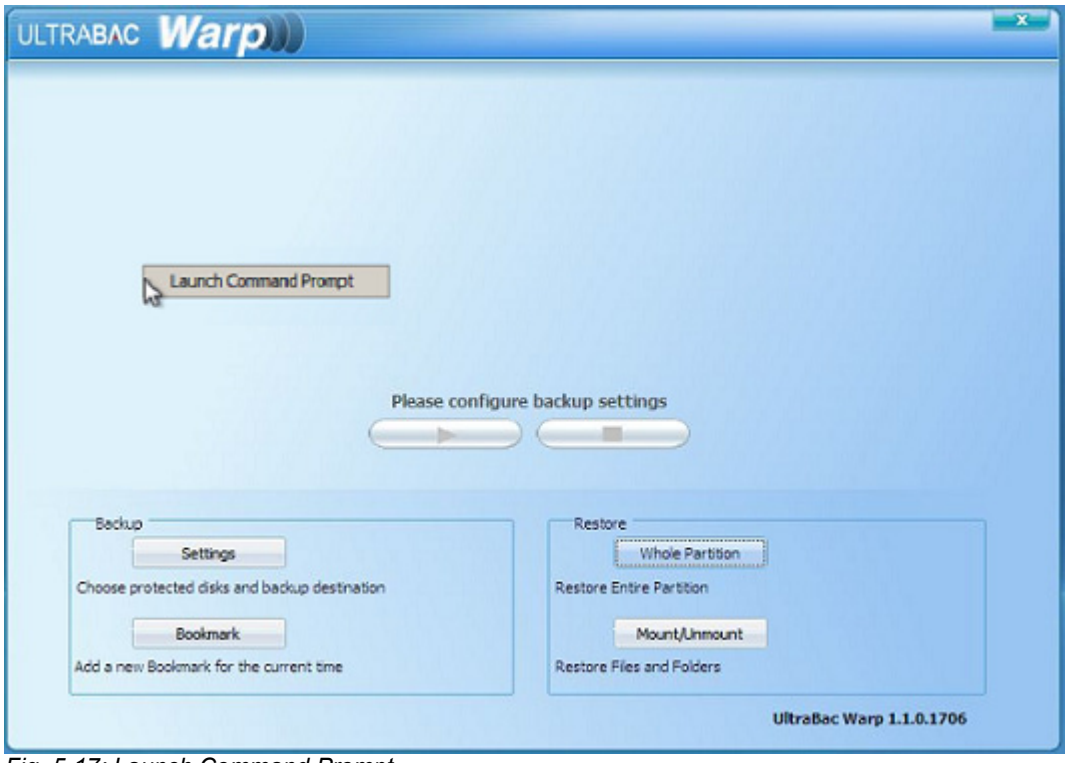


Fig. 5-17: Launch Command Prompt.

Step 4: Click "Whole Partition" and the Restore Whole Partition screen will appear.

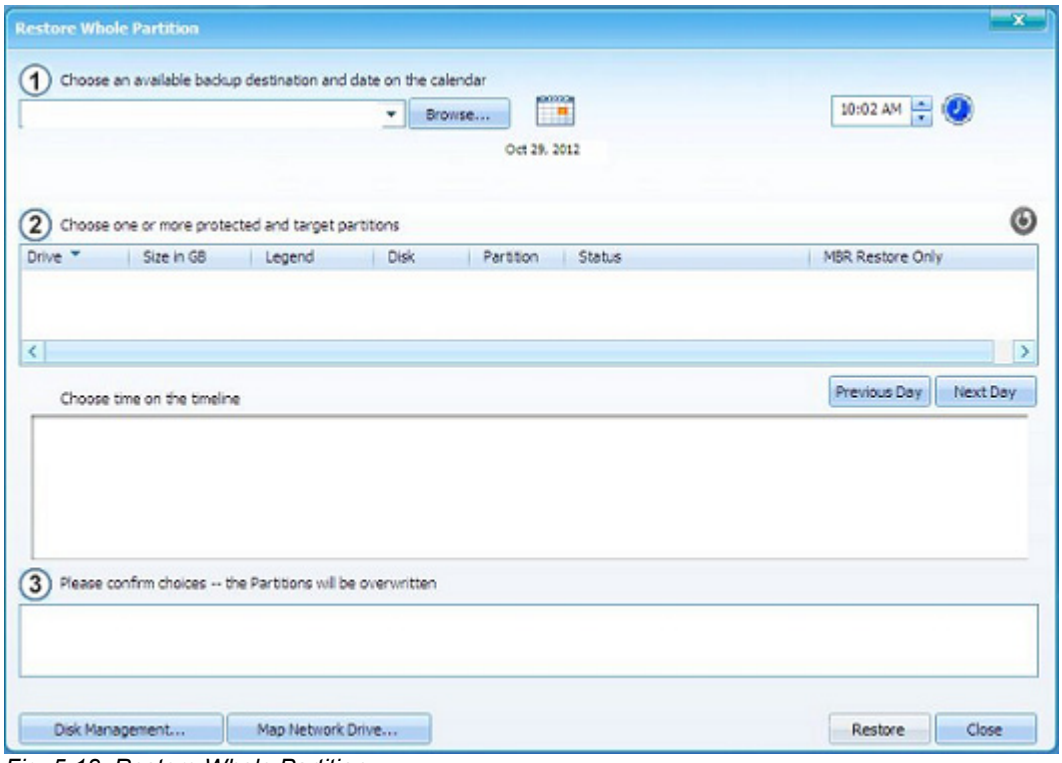


Fig. 5-18: Restore Whole Partition.

During the restore process, there are two options that may be used, if necessary, depending on the BMR scenario.

- Option 1: Use the "Disk Management..." button to manage the disks and their partitions you wish to restore to. The "Disk Management" function on the BMR ISO is a custom utility created for the BMR ISO and is not the Disk Management you would typically see in Windows. A detailed description of Disk Management is at the end of the section.
- Option 2: Use the "Map Network Drive..." button to map to a shared drive on a network if the backup file destination you wish to restore from is on a remote drive and not locally attached.

Step 5: Choose the backup destination containing the backup you wish to restore from. If your backup data exists on a remote network drive, click "Map Network Drive..." to fetch this data. If your backup data is present locally, skip steps 6 through 9 and go directly to step 10.

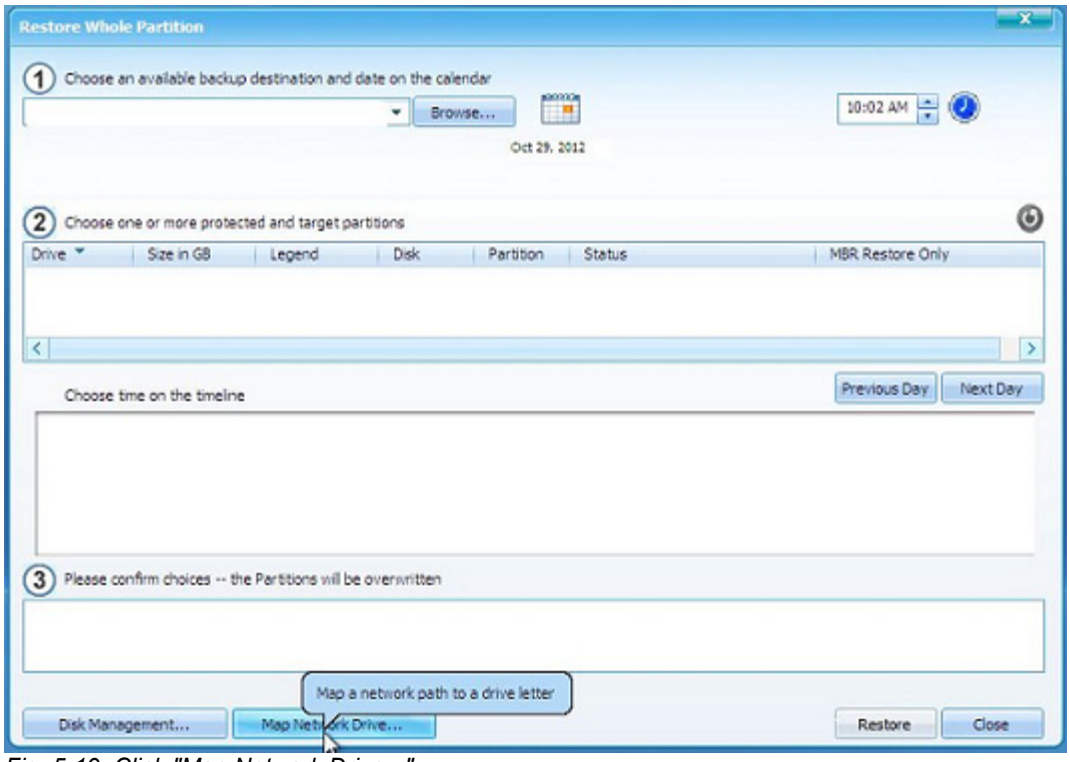


Fig. 5-19: Click "Map Network Drive...".

Step 6: A *Map Network Drive* dialogue box will be displayed asking for the drive letter and the folder path you wish to connect to. You will also be asked for a user name, password, and domain of the computer where the backups are located. Click "OK". This will map the drive letter you specified to the network path where the backup files are stored.

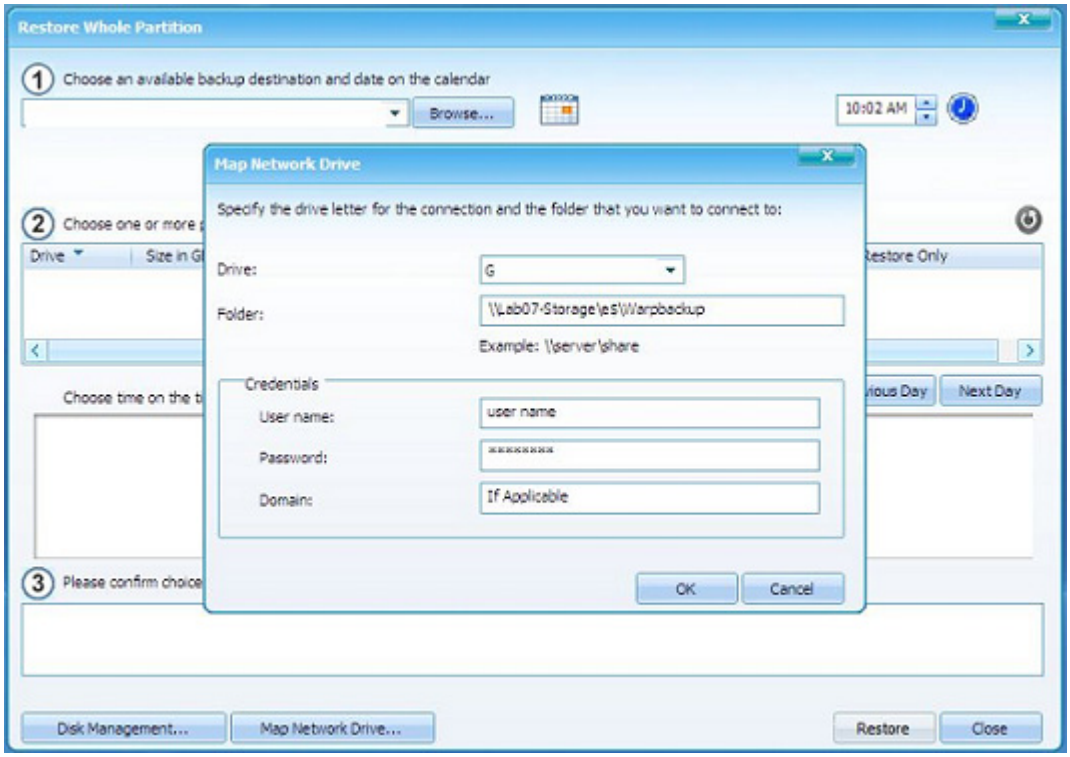


Fig. 5-20: Map Network Drive.

Step 7: You will see a confirmation box after the drive is successfully mapped to the network path, as seen in figure 5-21. Click "OK" and you will return to the Restore Whole Partition main window.

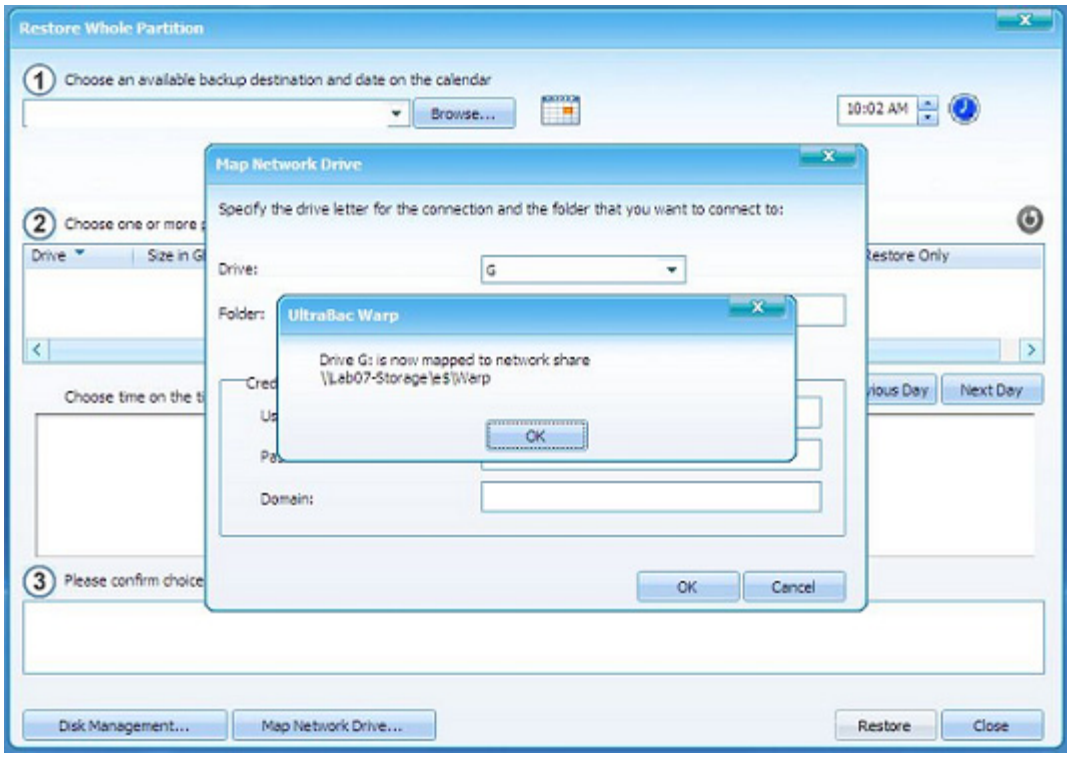


Fig. 5-21: Map Network Drive confirmation box.

Step 8: Choose the mapped drive from the list shown in figure 5-22 by clicking on the "Browse" button.

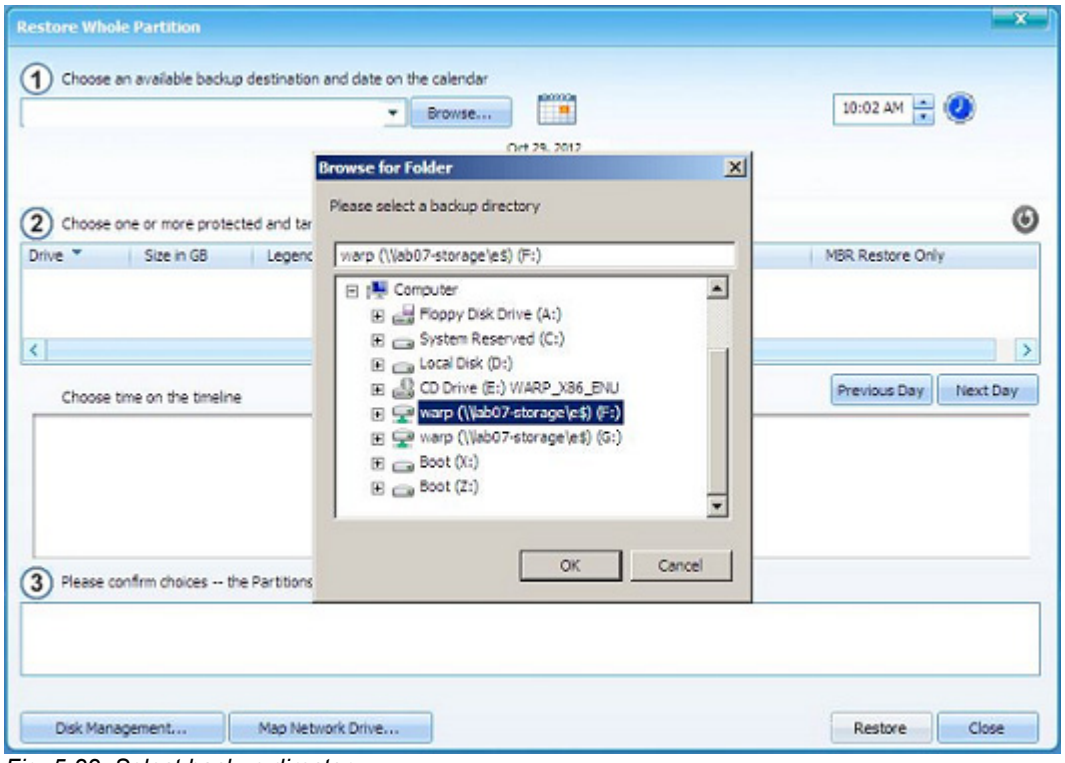


Fig. 5-22: Select backup directory.

Step 9: Enter the correct credentials to connect to the remote mapped network drive.

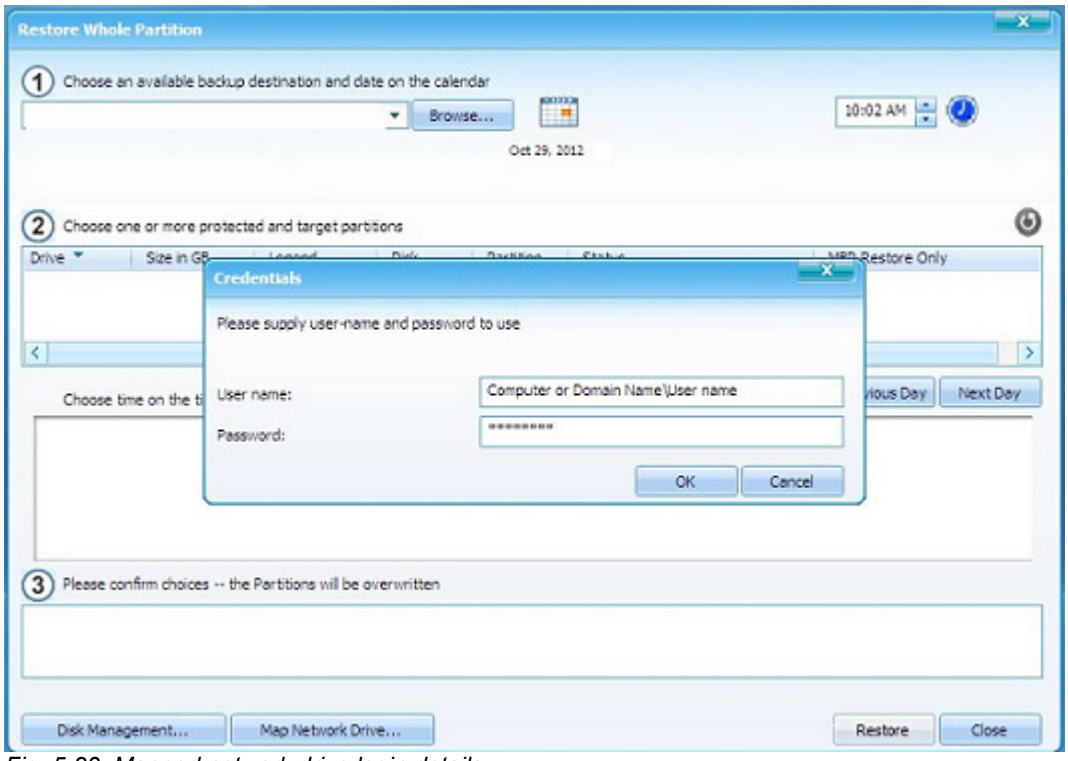


Fig. 5-23: Mapped network drive login details.

Step 10: Choose one or more partitions for restore. The calender will reflect the backup set dates and times available for restore.

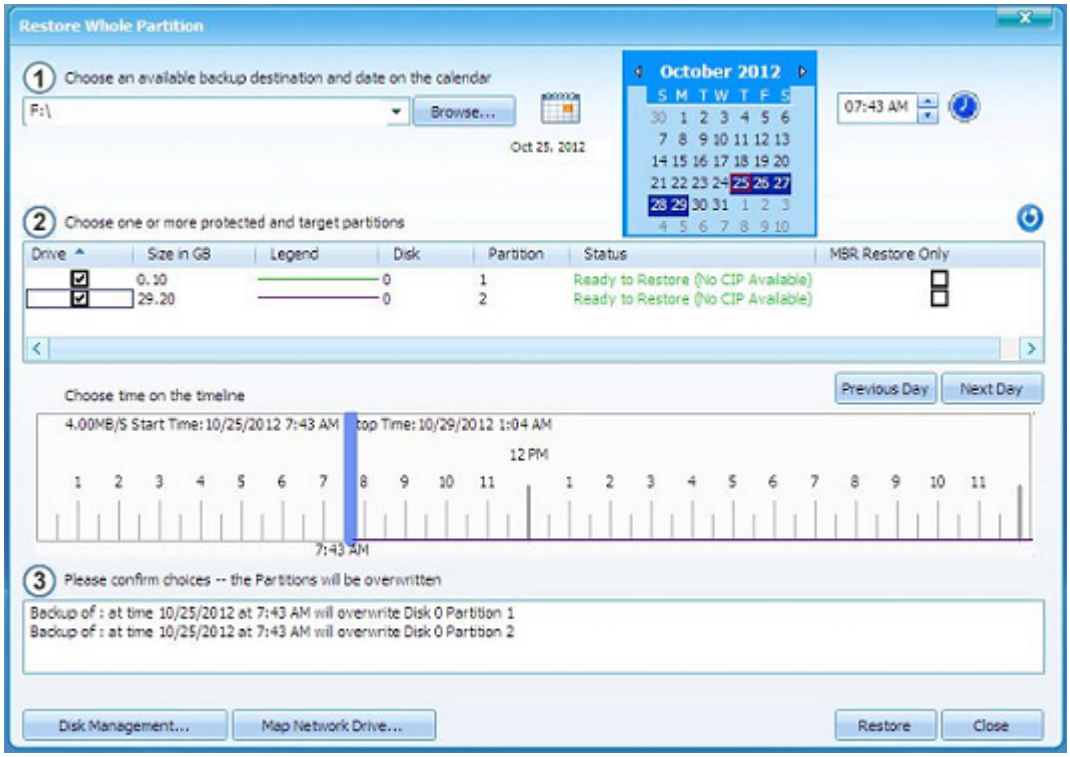

Restore Whole Partition
1 Choose an available backup destination and date on the calendar
F:\
Browse...
Oct 25, 2012
October 2012
S M T W T F S
30 1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31 1 2 3
4 5 6 7 8 9 10
07:43 AM
2 Choose one or more protected and target partitions
Drive
Size in GB
Legend
Disk
Partition
Status
MBR Restore Only
0, 10
29.20
0
0
1
2
Ready to Restore (No CIP Available)
Ready to Restore (No CIP Available)
Choose time on the timeline
Previous Day
Next Day
4.00MB/S Start Time: 10/25/2012 7:43 AM
top Time: 10/29/2012 1:04 AM
12 PM
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11
7:43 AM
3 Please confirm choices -- the Partitions will be overwritten
Backup of : at time 10/25/2012 at 7:43 AM will overwrite Disk 0 Partition 1
Backup of : at time 10/25/2012 at 7:43 AM will overwrite Disk 0 Partition 2
Disk Management...
Map Network Drive...
Restore
Close

Fig. 5-24: Partitions for restore.

Scenario 1: BMR to original disk and hardware.

Step 1: Click the Restore button. In the following example, this will restore both the 100 MB System Reserved boot partition (Windows Vista and later) as well as the OS partition, as seen in figure 5-25.

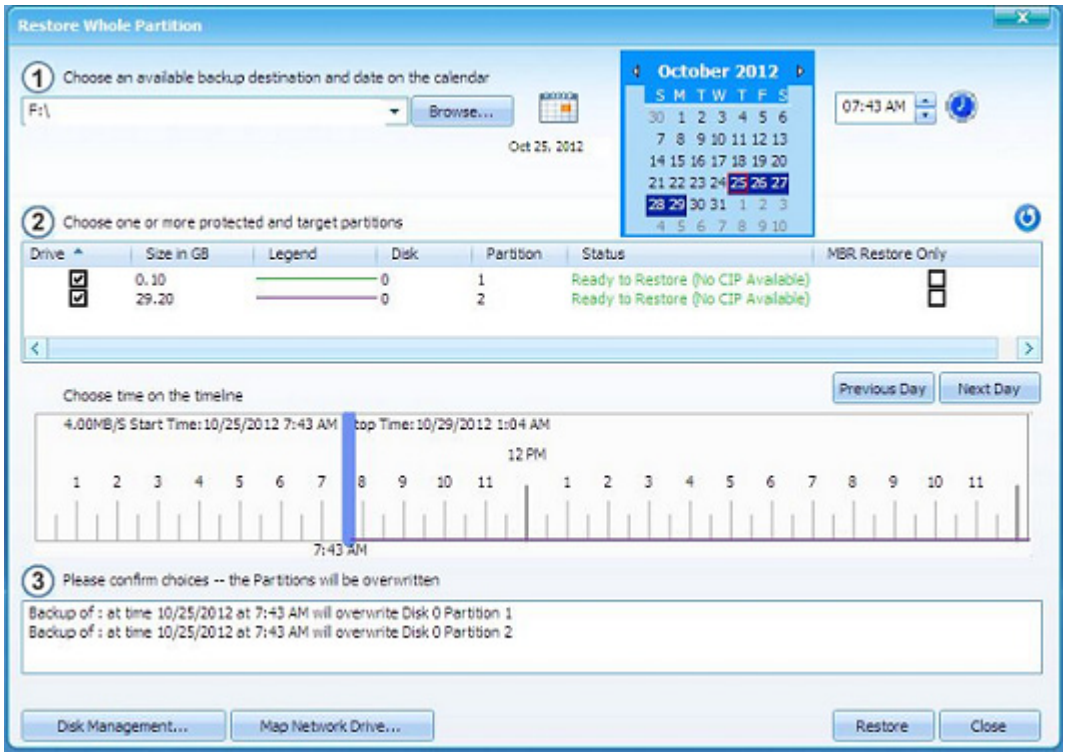


Fig. 5-25: Restore C:.

Step 2: A Restore options box will appear, these options will be used when doing a dissimilar hardware restore, as seen in Figure 5-26. For Scenarios 1 and 2, you will leave all of the boxes unchecked. Click the "OK" button.

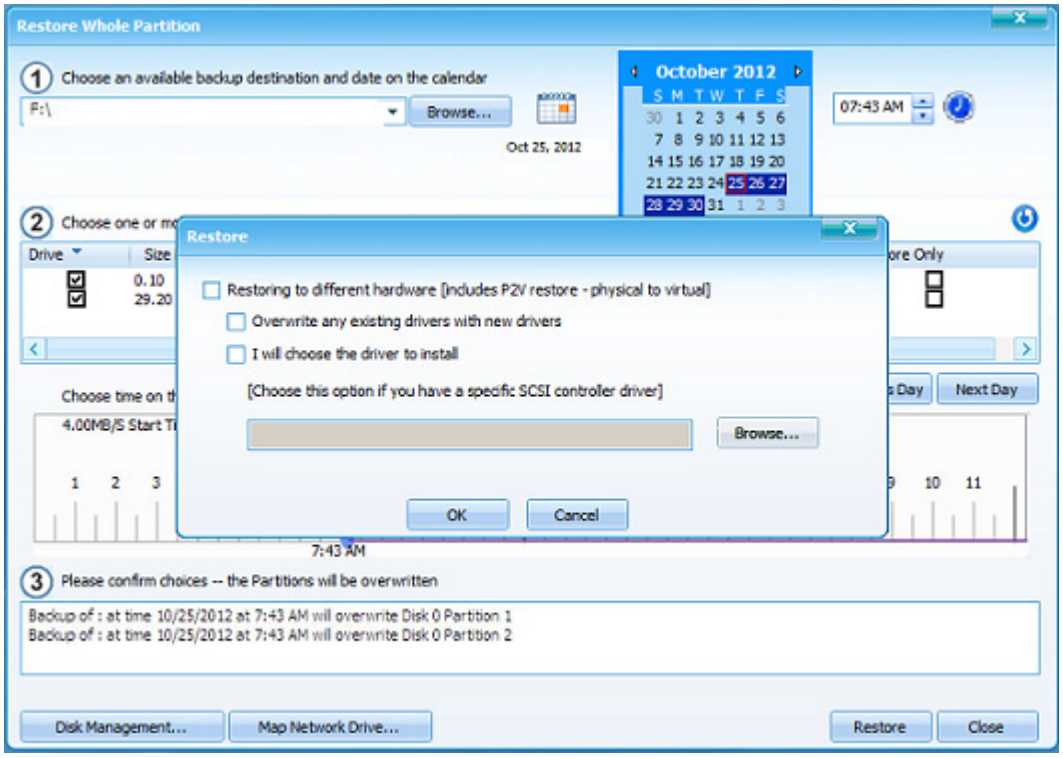

Restore Whole Partition
Choose an available backup destination and date on the calendar
F:\
Browse...
Oct 25, 2012
October 2012
07:43 AM
Restore
Restoring to different hardware [includes P2V restore - physical to virtual]
Overwrite any existing drivers with new drivers
I will choose the driver to install
[Choose this option if you have a specific SCSI controller driver]
Browse...
OK
Cancel
Drive
Size
Next Day
Please confirm choices -- the Partitions will be overwritten
Backup of : at time 10/25/2012 at 7:43 AM will overwrite Disk 0 Partition 1
Backup of : at time 10/25/2012 at 7:43 AM will overwrite Disk 0 Partition 2
Disk Management...
Map Network Drive...
Restore
Close

Fig. 5-26: Restore options.

Step 3: A **s**uccess message is displayed saying "Restore completed successfully". Click "OK".

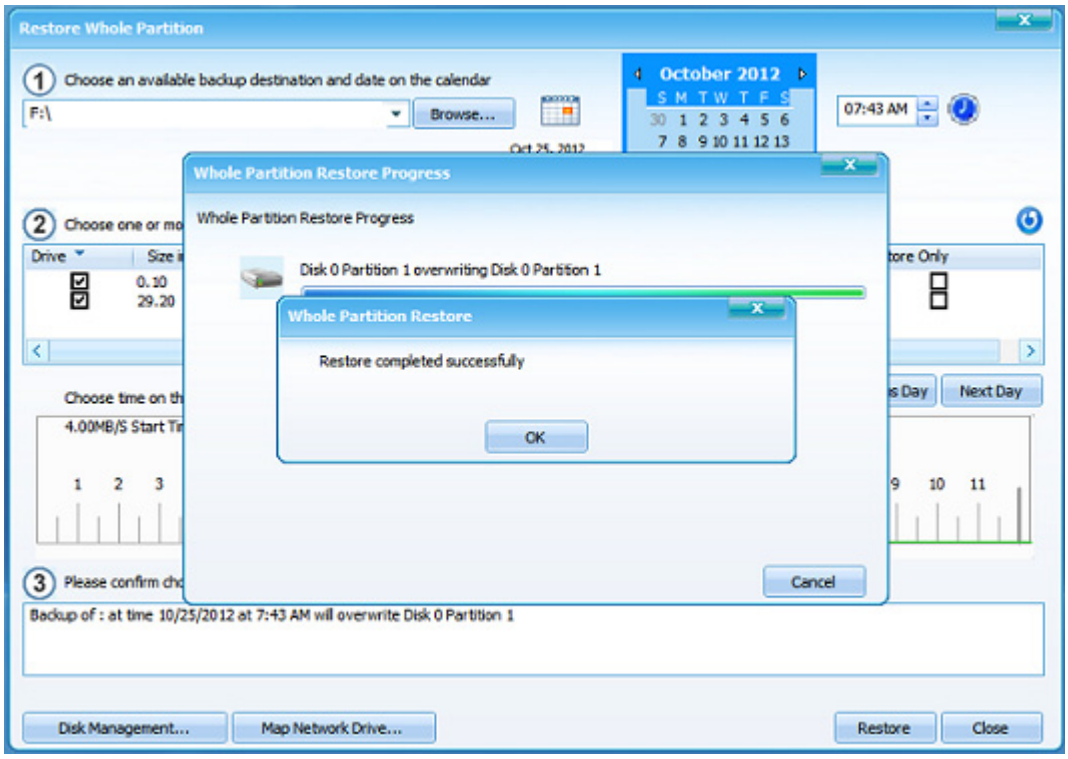


Fig. 5-27: Restore C: successful.

Step 4: Close the whole partition window to return to the initial main screen. Click "Close" on the main screen. Reboot the computer for all the changes to be effective after a successful BMR.

Fig. 5-28: Reboot system

Scenario 2: BMR to a new hard disk but otherwise original hardware.

Step 1: The new hard disk must be as large as or larger than the hard disk that it is replacing. In the Restore Whole Partition screen, check the "MBR Restore Only" boxes for the partitions of the disk to be restored. Click the "Restore" button to restore the Master Boot Record (MBR) from the backup set to the selected drive, as seen in Figure 5-29. This will rebuild the Master Boot Record on the disk/partition you have selected. When doing an "MBR Restore Only" restore, the Restore options window does not pop up.

Please Note: The current version of UltraBac Warp does not support restoring to partitions of a different size than the original. The next release will support resizing of the partitions using "Disk Management".

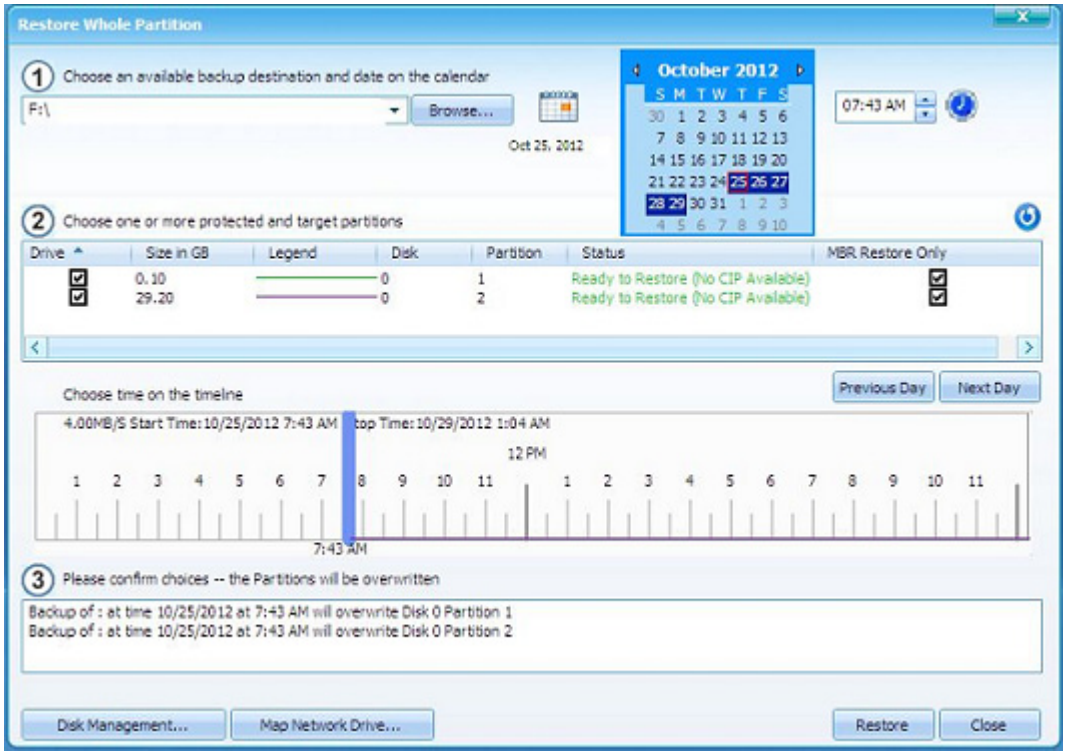


Fig. 5-29: MBR Restore only.

Step 2: A **s**uccess message is displayed saying "Restore completed successfully". Click "OK".

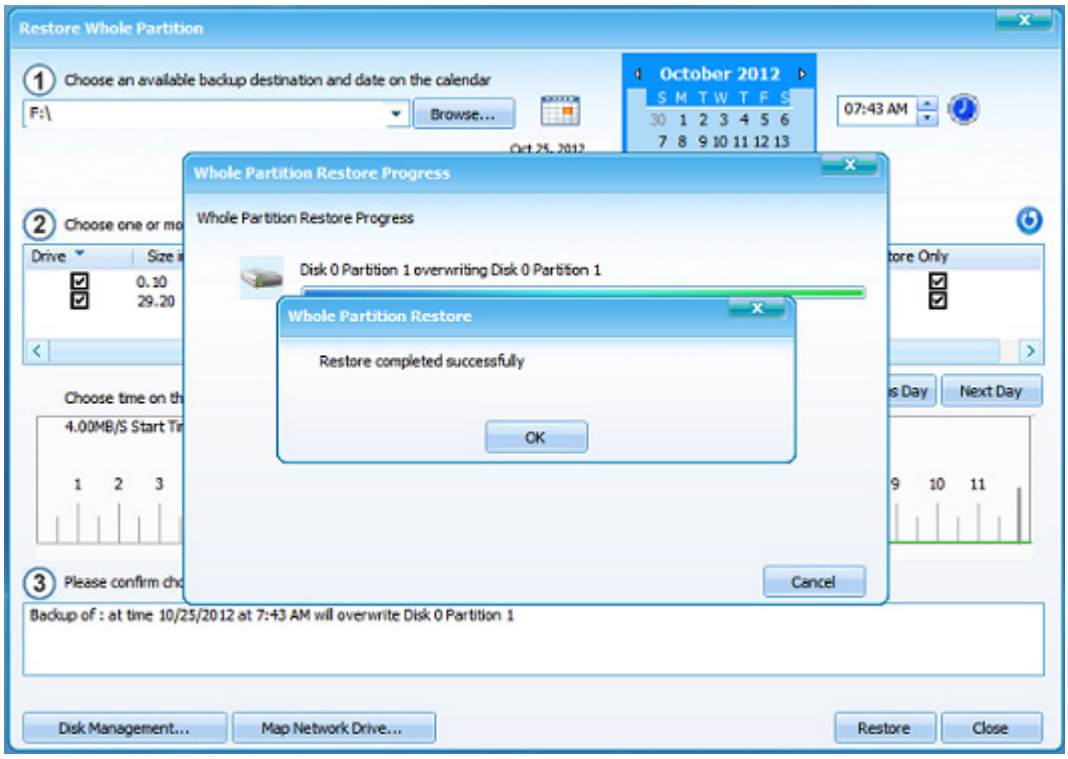


Fig. 5-30: MBR Restore successful.

Step 3: Once the MBR is successfully restored, follow steps 1 through 4 under *Scenario 1* to finish the BMR restore of the partitions.

Scenario 3: BMR to dissimilar hardware.

When restoring to dissimilar hardware, the partitions must be restored individually. The only partition that requires the dissimilar restore options to be checked is the partition with the Windows System folder (e.g. c:\windows\). For Windows Vista and later, the System Reserved (boot) partition must be restored before any other partitions, including the Windows System partition with the dissimilar partition restore. For the following example, the System Reserved (boot) partition has already been restored individually using either Scenario 1 or Scenario 2.

Step 1: Check the box next to the partition containing the Windows System folder and click "Restore".

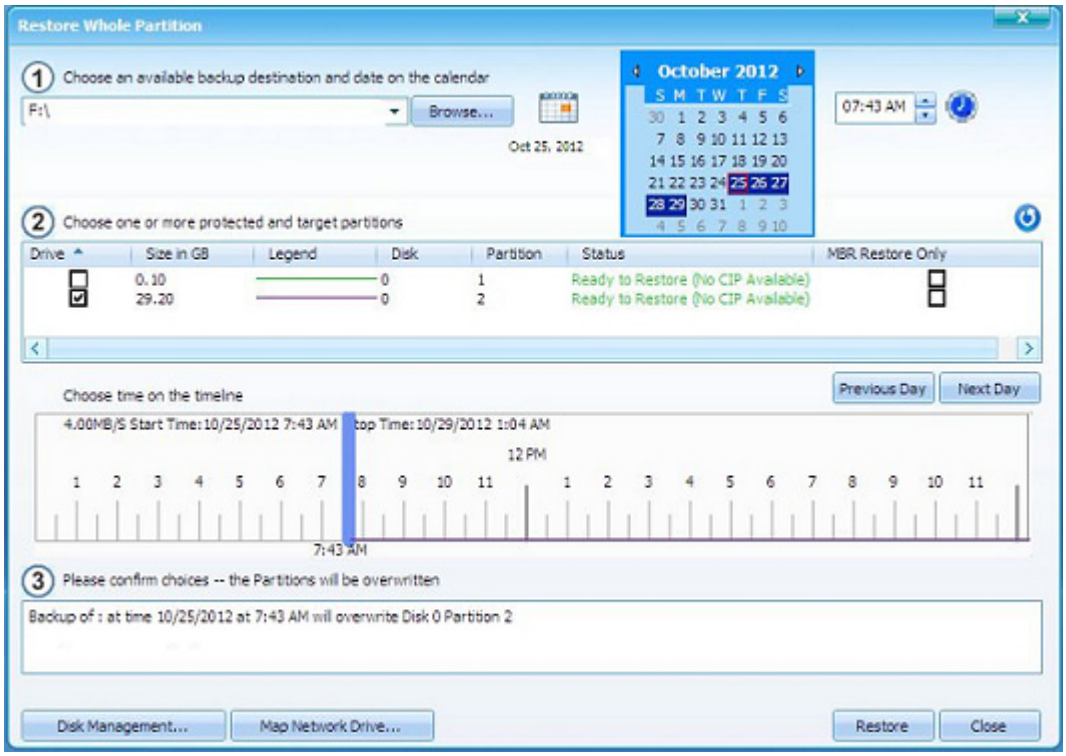


Fig. 5-31: Restore Windows System folder partition.

Step 2: A Restore options box will appear, these options will be used when performing a dissimilar hardware restore, as seen in Figure 5-32. Choose the option for "Restoring to different hardware [includes P2V restore - physical to virtual]" on the Windows System folder partition. When the "Restoring to different hardware..." box is checked, the first option "Overwrite any existing drivers with new drivers" must also be checked. This selection must be checked in order for the updated drivers to be applied. There is also an option to allow you to install a custom driver; this option only applies when you have a custom disk controller driver to install. Click "OK". If you need to load a custom driver from a network location, you will have to map a network drive before doing the steps for the dissimilar hardware restore.

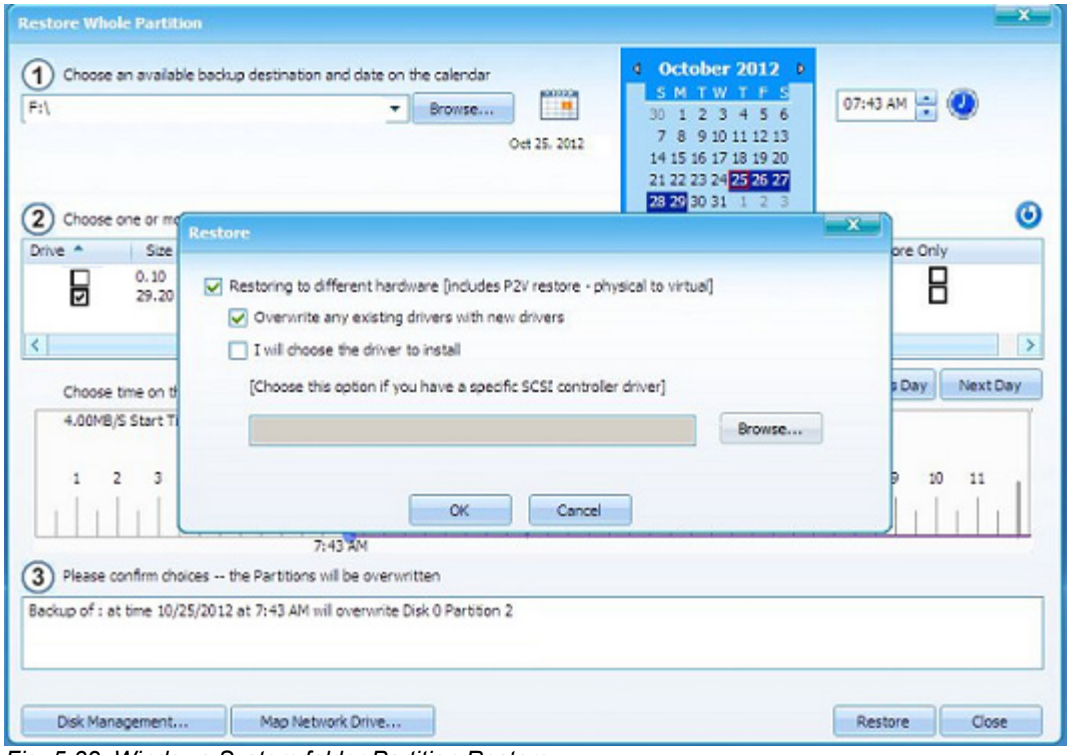

Restore Whole Partition
Choose an available backup destination and date on the calendar
F:\
Browse...
Oct 25, 2012
October 2012
07:43 AM
Restore
Restoring to different hardware [includes P2V restore - physical to virtual]
Overwrite any existing drivers with new drivers
I will choose the driver to install
[Choose this option if you have a specific SCSI controller driver]
Browse...
OK
Cancel
Next Day
Please confirm choices -- the Partitions will be overwritten
Backup of : at time 10/25/2012 at 7:43 AM will overwrite Disk 0 Partition 2
Disk Management...
Map Network Drive...
Restore
Close

Fig. 5-32: Windows System folder Partition Restore.

Step 3: Start the restore. You will receive a confirmation message at the end of a successful restore. Click "OK".

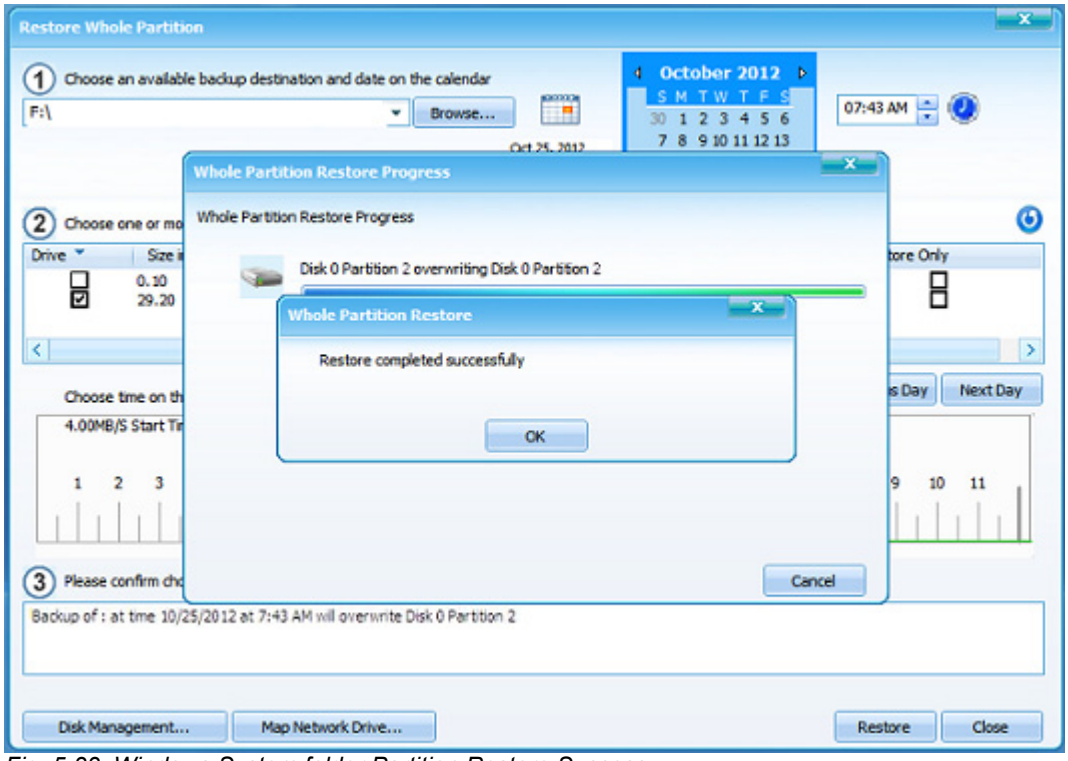


Fig. 5-33: Windows System folder Partition Restore Success

Step 4: Close the whole partition window and you will see the initial main screen. Click "Close" on the main screen. Reboot the computer for all the changes to take effect after a successful BMR.

Fig. 5-34: Reboot system

Disk Management

Use "Disk Management..." to prepare the disk and partition(s) for restoring the backup data to. If you are restoring back to the original disks, partitions, and hardware, changes in Disk Management are not necessary.

"Disk management..." consists of the following options:

- **Select Disk** – This drop-down menu allows the selection of all disks in the system for viewing in the "Disk Management" screen.
- **Wipe MBR** – This option will delete the Master Boot Record (including all partition information) on the selected disk.

  Please Note: Only advanced users should use the Wipe MBR option since it will require the recreation of the 100 MB boot/utility partition on Windows Vista and later.
- **Delete Partition** – This option allows the deletion of selected partitions on the selected disk from the partition list. You can select multiple partitions from the list.
- **Create Partition** – This allows you to create a partition on the selected disk.

  Partition type – This option allows the creation of one partition, either Primary, Extended, or Logical.

  Partition size in MB – Specifies the size of the partition to be created.

  Partition Style –

  Windows 2003 / XP or earlier OS – Sets the partition's starting sector at 63.
  Windows 2008 / Vista or later OS – Sets the partition's starting sector at 2048.

  Available disk space in MB – Specifies the available space on disk.

  Minimum partition size in MB – Specifies the maximum size available for a partition.

Select Disk

The "Select Disk" drop-down box allows you to choose which disk in the computer to edit. The disks are numbered sequentially starting from "Disk0". Click on the desired disk in the options to select it.

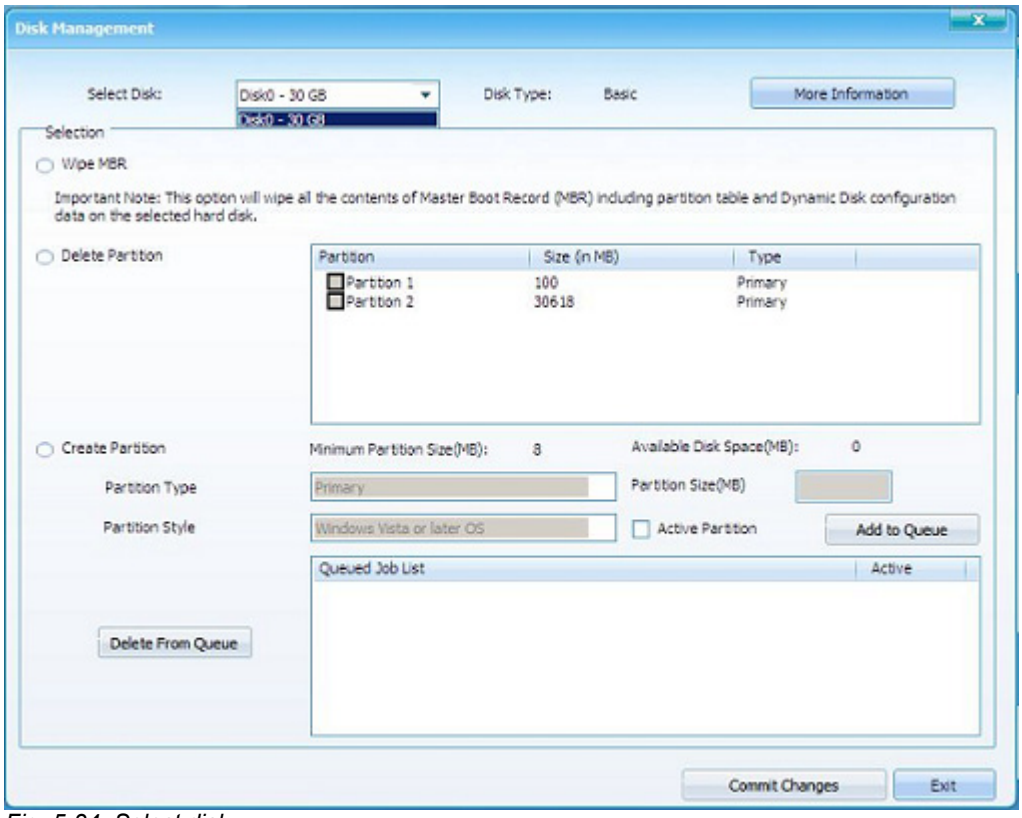


Fig. 5-34: Select disk.

Wipe BMR

The "Wipe BMR" option will delete the Master Boot Record (MBR) of the selected disk. Select "Wipe MBR" by clicking the radio button beside it, then click "Commit Changes" as seen in figure 5-35.

Please Note: Clicking the "Wipe MBR" radio button will clear all partition information on the disk, rendering it unbootable. Use this utility with extreme caution. Be certain the correct disk is chosen through the "Select Disk" drop-down box before executing "Wipe MBR".

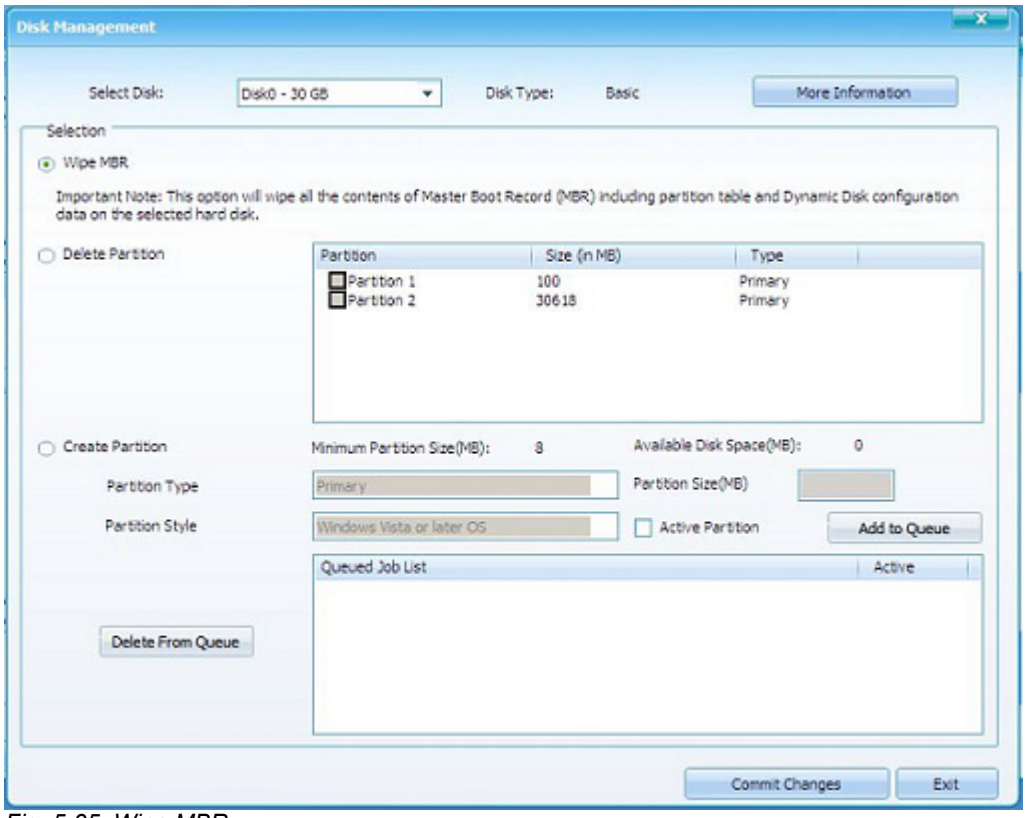


Fig. 5-35: Wipe MBR.

Delete Partition

The "Delete Partition" option allows you to delete selected partitions of the selected disk from the partition list. You can select multiple partitions from the list. Select "Delete Partition" by clicking the radio button beside it, then select the partitions you want to delete and click "Commit Changes" as seen in figure 5-36.

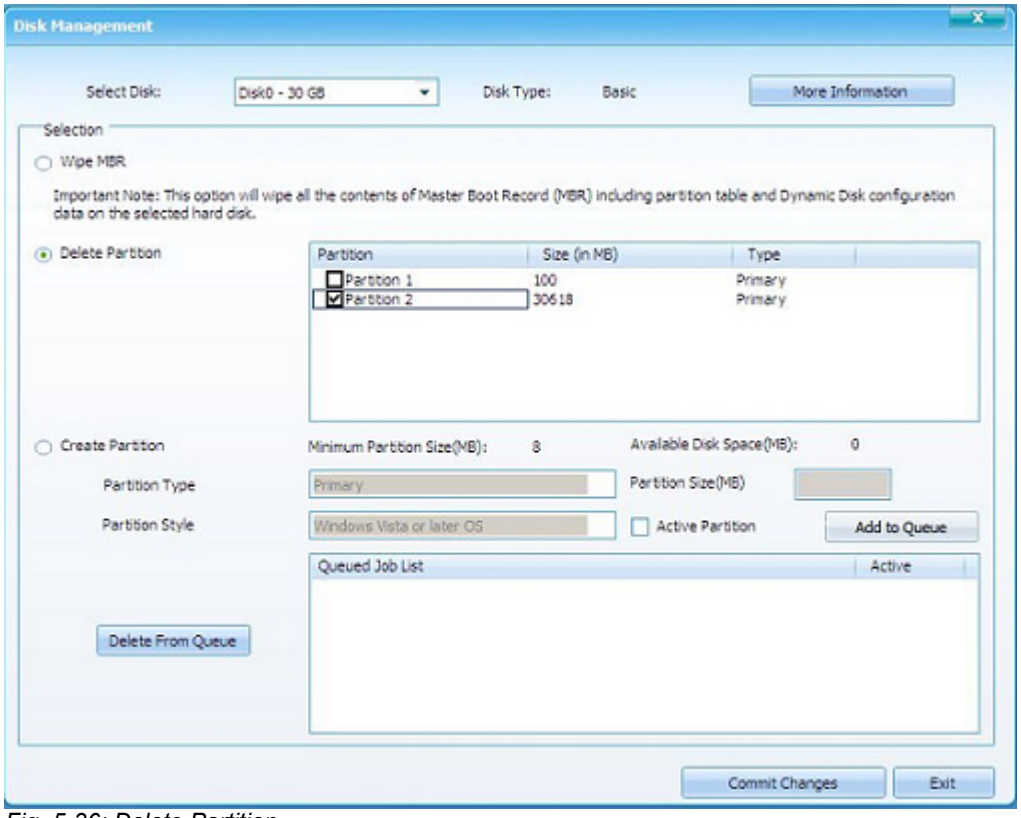


Fig. 5-36: Delete Partition.

Create Partition

The "Create Partition" option allows you to create a partition on the selected disk. Select "Create Partition" by clicking the radio button beside it.

Choose a Partition Type from the drop down list and the size of the partition in the Partition Size (MB) box as seen in figure 5-37.

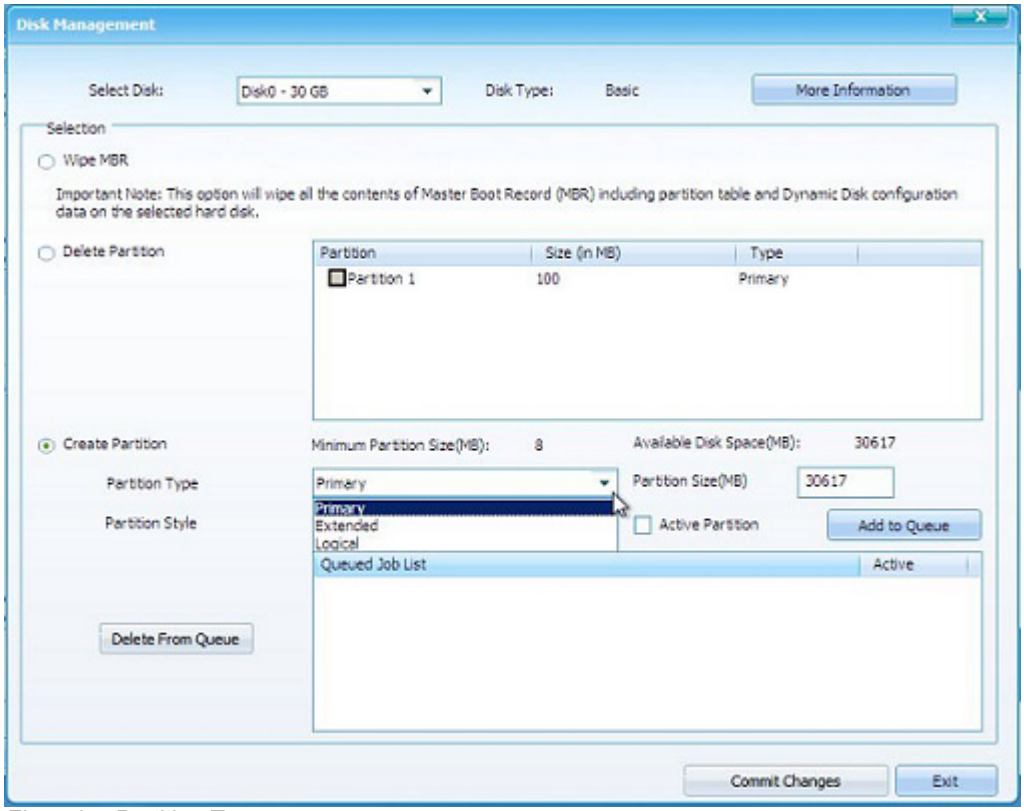


Fig. 5-37: Partition Type.

Choose a Partition Style from the drop-down list for the partitions that are to be created as seen in figure 5-38.

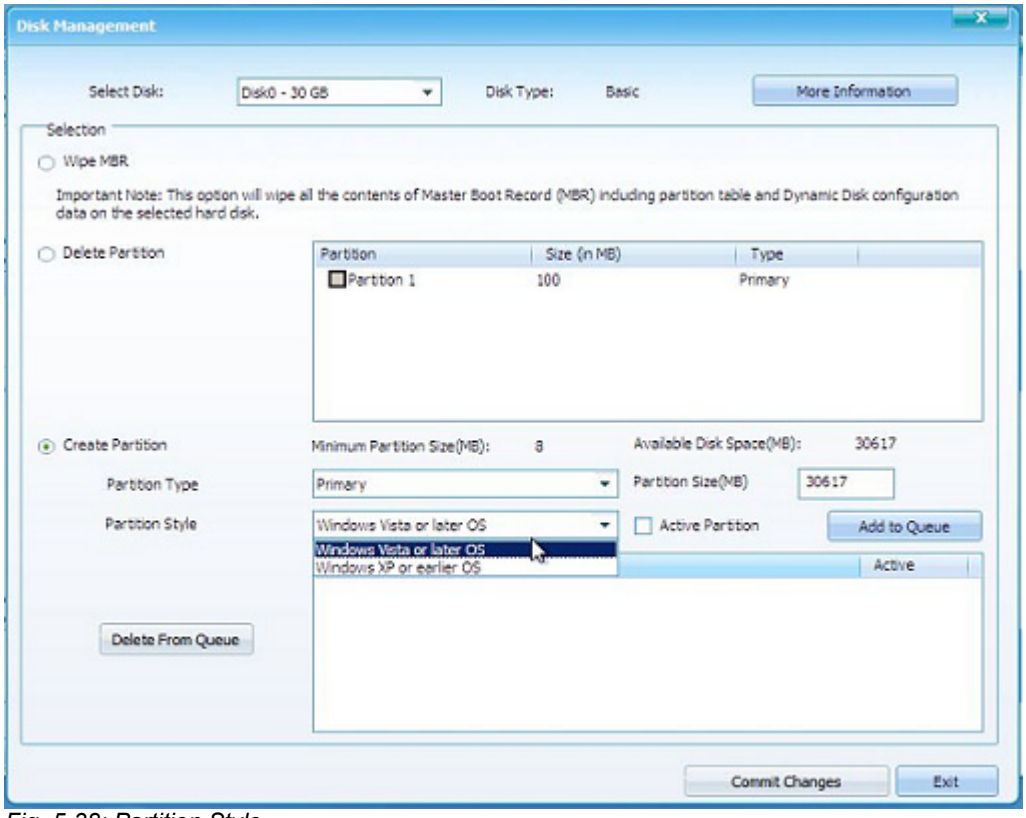


Fig. 5-38: Partition Style

Add the partitions to a queue by clicking on the "Add to Queue" button. If you wish to make the partition an active partition, check the "Active Partition" box before clicking the "Add to Queue" button and it will mark the partition to be bootable when added to queue as seen in figure 5-39.

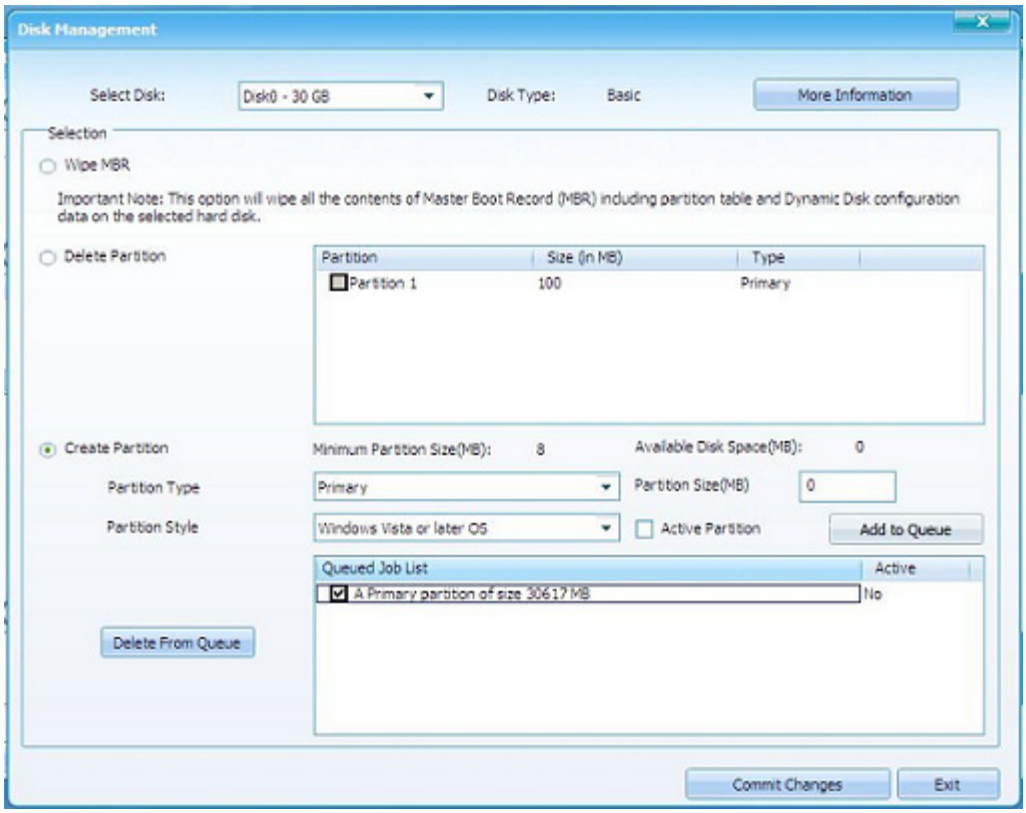


Fig. 5-39: Add to Queue.

If you add a partition to the queue that you decide you do not want, you can delete the partition from the queue by checking the box next to it and click "Delete From Queue".

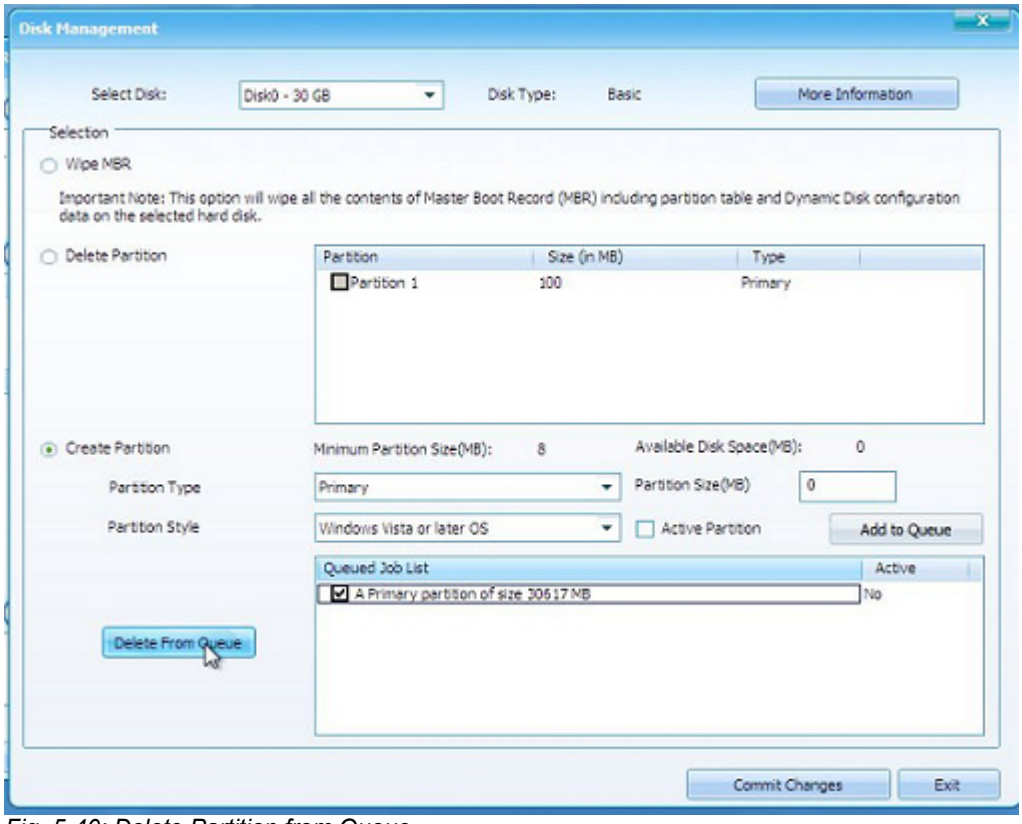


Fig. 5-40: Delete Partition from Queue.

Once the "Queued Job List" is accurate, put a check mark in each of the boxes for the "Queued Job List" and click "Commit Changes" to create new disk structure. If you do not put a check mark in the box, that select will not be committed. Ensure the partitions in the "Queued Job List" are accurate before committing the changes. If you commit changes with a partition in the queue you did not want, then you will need to use "Delete Partitions" to remove the new unwanted partition.

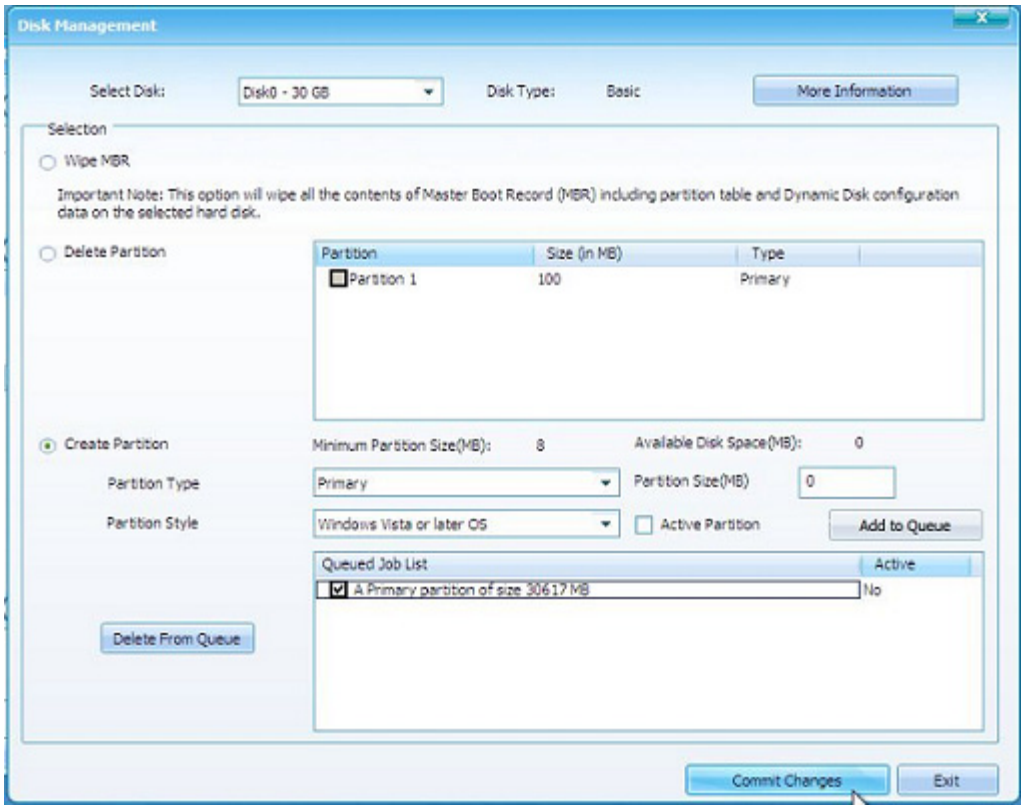


Fig. 5-41: Click "Commit Changes".

You will then see the created partition, partition size, and partition type in the list as seen in figure 5-42.

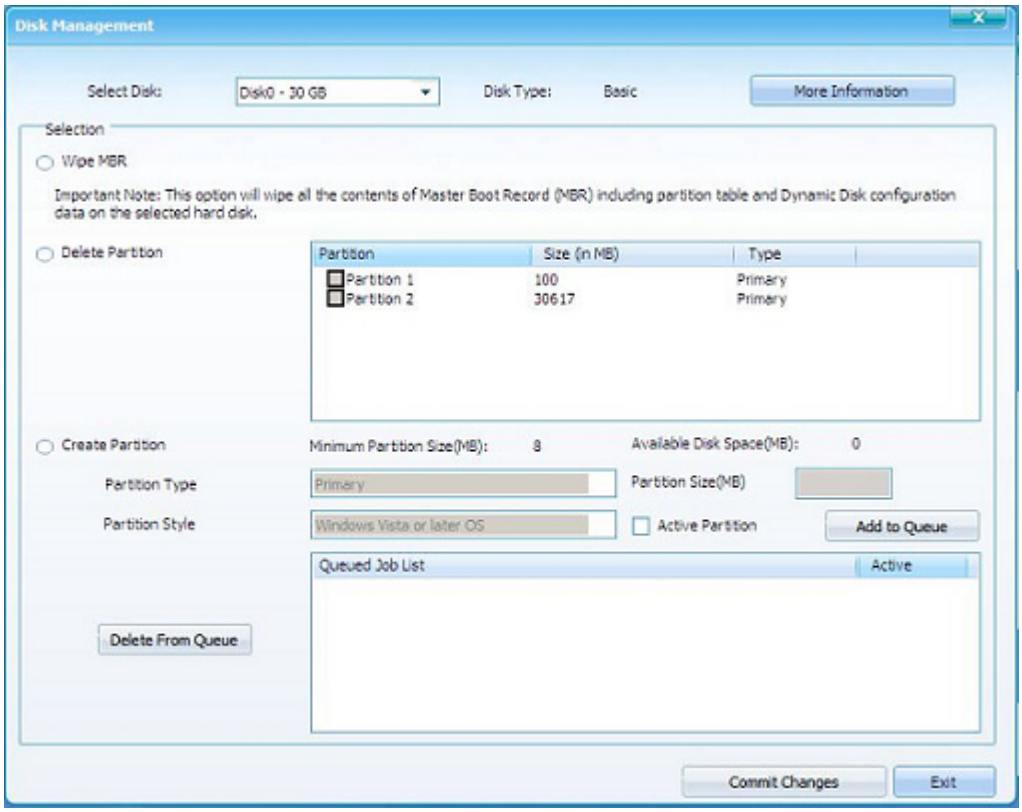


Fig. 5-42: Created partitions.

Click the "Exit" button to exit from the Disk Management screen.

Frequently Asked Questions

Question: What is Continuous Image Protection™?

Answer: Continuous Image Protection (CIP™) is a form of Continuous Data Protection (CDP) that is faster than traditional CDP solutions. CIP automatically recognizes the changes made to the block(s) on the disk and saves block-level changes instead of file-level changes. This means if you change only byte of a 100 GB file, only the changed block is backed up instead of the entire changed file.

Question: What are the advantages of CDP over traditional data backup methods?

Answer: CDP prevents loss of data as the modified contents of protected drives are backed up automatically in real-time. You can accurately restore any earlier version of the data through the whole partition restore or the mount process.

Question: What can a user back up?

Answer: A user can back up any non-removable drive using UltraBac Warp, whether it is mounted or unmounted. Mounted partitions (formatted and lettered) can be backed up using CIP, while unmounted partitions (formatted but not lettered) can still do a full backup. Mapped drives or removable drives cannot be backed up using UltraBac Warp.

Question: What are the options for backup destinations?

Answer: A user can use any non-OS drive (that is not under UltraBac Warp protection), a mapped drive on a remote system or NAS/SAN, or a USB drive as backup destinations. A user must provide valid logon credentials (if any) when using a remote destination.

Question: Which backup retention policy should be selected?

Answer: UltraBac Warp has four retention policies. If you wish to retain more granular backup copies for a longer period of time, Retention Policy 1 should be selected. The drawback to this selection is it will consume more space on the backup destination. If you are space conscious, Retention Policy 4 should be selected. This selection will use less space but retain a less granular number of backup copies. For results somewhere in between, a user can select either Retention Policy 2 or 3. Please refer to product documentation for detailed information.

Question: What if an encryption key is forgotten or lost?

Answer: An encryption key must be entered to restore an encrypted backup. An encrypted backup cannot be restored without the valid encryption key. If the encryption key is forgotten or lost there is **NO way** to restore the encrypted backup. UltraBac Warp provides the ability to export encryption keys to a file in a specified location. It is highly recommended that this process be utilized for safe keeping of encryption keys. When it is necessary to perform a restore the encryption key can then be imported from the specified location.

Question: Why is the backup paused?

Answer: In normal circumstances, backups will not be seen paused state. The following scenarios can lead the backup process to become paused:

- The demo license expired.
- The backup destination is not accessible.
- The password for the backup destination has been changed.
- The backup destination is full.

Question: Why did the backup stop automatically?

Answer: We support Continuous Image Protection for mounted drives (with drive letter). If only non-mounted partitions are selected to be protected, once the full backup is complete, the CIP process would stop on the non-mounted partitions. This means changes to the non-mounted partitions are not being backed up and saved.

Question: Why are bookmarks beneficial?

Answer: A bookmark is a specified and named point in time copy of all the protected partitions. Instead of providing an exact time and date of the backup the user wishes to restore from, a bookmark the user created can be selected to restore/mount the backup data.

Question: Can backups be created once the license has expired?

Answer: No. UltraBac Warp requires a valid license to back up. On order to resume the backup process a user may apply for a demo license extension, or permanent license may be purchased.

Question: Can accidentally deleted files be recovered?

Answer: Yes. Please refer to Mount/Unmount section in the UltraBac Warp User Guide for details.

Question: Can data be restored after a hard drive failure?

Answer: Yes. First replace the damaged hard drive. If the machine is unbootable because the failed drive was your system drive, then please refer to the Bare Metal Recovery section in the UltraBac Warp User Guide for details on how to perform a full restore to the new hard drive using the user created Bare Metal Recovery disk. If the machine is bootable, recreate the partition layout on the new hard drive and restore the data using the whole partition restore option.

Question: Why should the Bare Metal Recovery (BMR) CD be created?

Answer: If user loses the machine's hard drives or the machine is unable to boot from the hard disk, the BMR CD will help to boot machine into a Win PE environment. Then the UltraBac Warp application is used to recover the system. Please refer to BMR section in the UltraBac Warp User Guide for detailed steps on restoring using the user created BMR CD.

Question: How is a Bare Metal Recovery (BMR) CD created?

Answer: Please refer to UltraBac Media Builder section in the UltraBac Warp User Guide for detailed steps on how to create the BMR CD.

Question: Should the System Reserved (100MB) partition be restored?

Answer: Windows Vista and later versions of Windows have a System Reserved partition. It is an important partition which stores metadata related to operating system. Users should backup/restore the System Reserved partition along with System partition (i.e. C:). If a user does not restore the System Reserved Windows partition, the system would not be able to boot from the hard disk.

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